

SCIENTIFIC WONDERS

ON THE EARTH
& IN SPACE



Yusuf Al-Hajj Ahmad



DARUSSALAM
GLOBAL LEADER IN ISLAMIC BOOKS







Scientific Wonders
on the Earth & in Space





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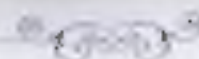


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the Most Gracious, the Most Merciful*

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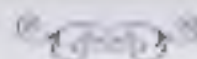
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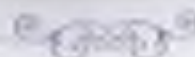
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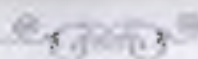
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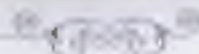
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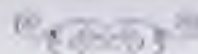
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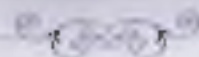
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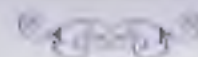
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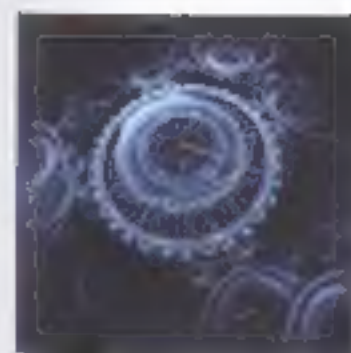
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Author's Note

All praise is due to Allah. We praise Him and we seek for His assistance and forgiveness. We seek refuge with Him from the evils of our own souls and from our misdeeds. No one can mislead whomever Allah guides and no one can guide whomever Allah causes to go astray.

I testify that there is no deity worthy of worship except Allah. He is One and He has no partner. I also testify that Muhammad is His Slave and Messenger. Allah sent him with the religion of guidance so that it may prevail over all other religions even if the disbelievers dislike that.

Speaking about scientific miracles has become a necessity these days, as knowledge has made great and rapid strides that cannot be stopped even for a moment. Everyday there are new inventions and astounding discoveries. All this strengthens a Believer's faith and increases confusion in the confused person.

Allah has blessed me with collecting all the conclusions that have been arrived at by the leaders in this art of scientific and medical miracles. I, then, decided that this compilation should comprehensively include every topic relating to miracles either from the Qur'an or from the authentic *Sunnah*. Some repetitions may be found in this work due to some benefits such as considering the differences in the scholars' methodologies of writing about one topic. The wisdom of this may be found in the popular saying, "You might find in a stream what you might not find in a sea."

Dear reader, on my part I have selected for you the most comprehensive, most authentic, most modern and most beautiful of these proofs. For the purpose of authentication, some of the specialists in these fields have shared their knowledge with me. I would mention, as an example, Dr. Muhammad Harb, a specialist obstetrician and gynecologist and Jihad 'Inayah and Mahtir Kabab, who are both pharmacists. I am very grateful to them.

There is no doubt that this work that you are reading, as a first

step on what the modern science has arrived at in our contemporary times, has already been mentioned in the Qur'an and mentioned by the Messenger of Allah, peace be upon him, more than 1,400 years ago. This is certainly not going to be the end either. There shall continue to be more and more discoveries that will show humanity that the Qur'an is truly Allah's Word. Allah says about the Qur'an:

﴿لَا يَأْتِيهِ الْبُتْلُ مِنْ بَيْنِ يَدَيْهِ وَلَا مِنْ خَلْفِهِ، تُرِيدُ مِنْ لَدُنْكَ الْحُكْمَ﴾

"Falsehood cannot come to it from before it or behind it; (it is) sent down by the All-Wise, Worthy of all praise (Allah, Glorified and Exalted be He)." (Soorah Fussilat 41:42)

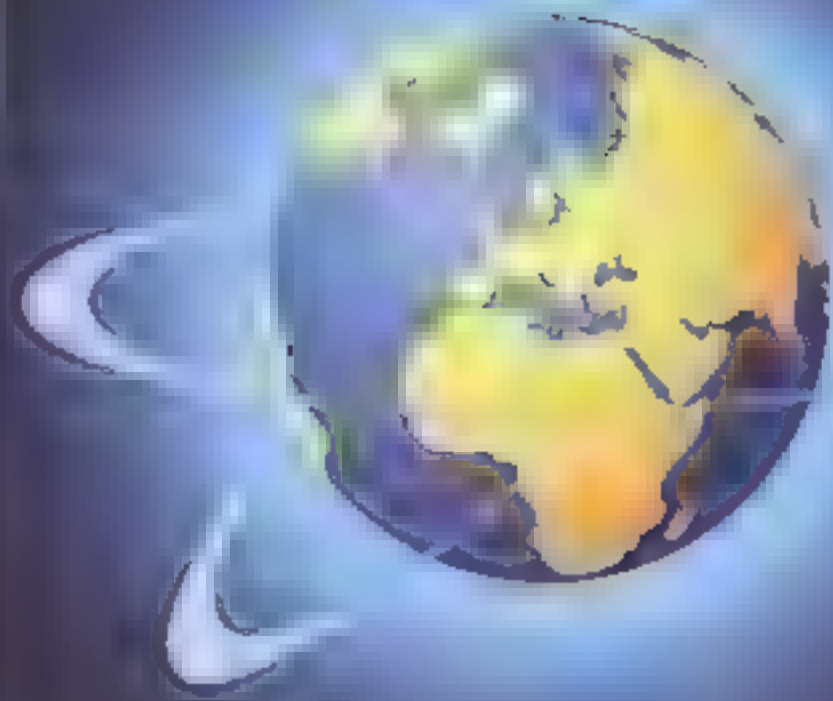
He also says:

﴿وَمَا يَتَّبِعُ الْوَحْيَ إِلَّا مَشِئَتُهُ﴾

"Nor does he speak of (his own) desire. It is only a Revelation revealed." (Soorah An-Najm 53:3-4)

This books discusses many topics. The main sections are: Miracles in the Earth and Miracles in astronomy, which are the most important topics discussed in this work. I beseech Allah to make all that I have collected and written to make a reminder for those who have sound hearts, the ability to listen and have presence of mind, and to make it purely for His sake and to benefit me and the Muslims as a whole with it. Indeed, He has power over all things and He is worthy of accepting prayers. All praise is due to Allah, the Lord of the worlds. May the blessings and peace of Allah be upon our leader Muhammad, his family and his Companions.

Servant of the *Sunnah*
Yusuf Al-Hajj Ahmad



The Scientific Wonders on the Earth

Section



The Scientific Wonders on the Earth

The miracles of the Qur'an regarding our surrounding environment, the seas, and animals, plants and other inorganic matters, are clear evidences that the Qur'an is the Word of Allah, the Lord who created them.

The Qur'an urges us to ponder over and inquire into the creation of the Earth so that this serves as a guide to recognize and realize the wisdom of a fairer Verses have followed others encouraging the man to ponder over the Earth and its contents, what is the secret behind this?

Allah the Most High says:

﴿لَعَلَّكُمْ تَتَّقُونَ﴾

"The creation of the heaven and the Earth is indeed greater than the creation of mankind, and yet most mankind know not (ar-Rah 40:57)





Earth's Movement

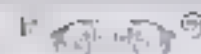
Allah, the Most High, says

﴿وَمِنْ آيَاتِهِ يَجْعَلُ الْغُيُوبَ وَجْهَ شَرِّ مِنَ السَّحَابِ
صُبْحَ قَوْمٍ لَيْلَى الْقَوْمِ كَمَا سَوَّى يَمْنَهُ حَبِيبٌ بِمَا مَعْكُورٌ﴾

"And you will see the mountains and think them solid but they shall pass away as the passing away of clouds. The work of Allah, Who perfected all things, verily He is Well-Acquainted with what you do. *Sourah An-Naml 27:88*

Historical antecedents

People have observed in the past that the Earth is stationary and as such thought that it was the centre of the universe and that it does not move, while the celestial bodies including the stars and other bodies move in complex orbits around it called epicycles. This was first proposed by the astronomer and mathematician, Claudius Ptolemy, and was accepted for several centuries. Some of the astronomers later studied the movement of the Earth around the sun, and Nicholas Copernicus developed the model whereby the spheres of the



fixed stars were stationary and that their apparent movements are only due to the movements of the Earth and the non-movement of the sun. However, the radical core of his theory was rejected or ignored.

The Greek philosopher and mathematician, Pythagoras, also mentioned the movement of the Earth but he was not really able to prove it. The Italian astronomer, physicist and astronomer, Galileo Galilei, at the end of the fifteenth century and the early parts of the sixteenth century developed astronomical telescopes with which he studied the movement of the Earth and other stellar movements and also supported the Copernican heliocentric theory of a sun-centered universe. Then came Johannes Kepler in the sixteenth century and presented proofs to establish the movement of the Earth and other celestial bodies.

Scientific Facts

1. The Earth moves in two basic ways: spinning movement on its own axis (rotation) and in a circle around the sun (revolution).
2. The Earth rotates on its own axis in a period of (23 hrs 56 min 4.1 sec).
3. The speed of the Earth's movement at the equatorial regions is about 1,670 km/h which is about 465 m/s and it reduces with the latitudes up to 312 m/s at 50 degrees and is completely unnoticed at the poles.
4. Three astronomical phenomena result from the rotation of the Earth on its own axis:
 - a. Day and Night and their succession
 - b. Difference in timing across the Earth's surface
 - c. Induction of a centrifugal force felt strongly at the equatorial regions



Scientific Explanation

The Solar System in which we live comprises a firmly connected arrangement which includes the sun and nine planets (currently known) swimming in their fifth century orbits. The Earth is one of the third planet from the sun and it completes its revolution around it in three hundred and sixty days and a quarter.

The *Encyclopedia of the American Academy of Science* says: The Earth rotates on its axis (spin axis) in the period of a day and revolves around the sun in the period of a year [] and its average speed during its revolution reaches about 30 []. The planets in the Solar System also have moons (satellites) that revolve round them of which forty-nine (49) are currently known even when there are strong indications of the occurrence of others particularly around Uranus and Neptune which are with the Earth the three known planets from sun. As for the Earth's moon, it completes one revolution around it in 27 days, 7 hours, 43 minutes increasing as it moves from one similar phase to the other.



The Solar System also makes a part of the large disk-shaped single aggregation of stars (galaxy) called the Milky Way which contains millions (in fact, billions) of other huge stars each of which also moves on its axis at different speeds. The galaxy rotates around an axis joining the galactic poles and by implication, the sun (one of the billions of stars in the galaxy), and its planets also move as the huge mass does. *The Encyclopedia of Science* says: The sun (which is located in the outer part of the galaxy) takes 200 million years to complete one trip around the centre of the galaxy!

The movement of the Earth round the sun was not known in astronomy until the sixteenth century from the works of the Polish astronomer and mathematician Nicolaus Copernicus who developed the heliocentric model of the Solar System, in which the sun is stationary and the Earth and the known planets move around it, as is mentioned in the *New British Encyclopedia*. This was a clear departure from the prevalent model Ptolemy's model, that the Earth was stationary at the centre of the universe. Thus, the *New British Encyclopedia* says: In the 2nd century CE, Ptolemaeus proposed his model of the universe with the Earth at its centre and this model was accepted for more than 1400

The world waited until Kepler came in the 17th century and established the scientific fact that everything in the universe including the moons and stars are in concordance with it moving on specific paths (orbits).

Looking at the Qur'an, we find that in His saying:

﴿وَرَأَى الْجِبَالَ كَحِبَبِ الْحَبِّ وَإِن يَبْقَىٰ مِن الشَّجَرِ إِلَّا أَشْجَارٌ مَّعْدُودَةٌ﴾

'And you will see the mountains and think them solid but they shall pass away as the passing away of clouds

is clear evidence that the mountains move as quickly as the clouds but mankind sees them firm and stationary. Here are astronomers saying that the Earth rotates together with the creatures on it – both living and non-living with the same speed. Thus, we would regard the mountains as stationary while in the real sense it rotates with the Earth.

The scientists have given an approximate example of that if we view two trains running at the same time and in the same direction and with the same speed, the person on one of them and looking at another person in the second train would think that he is static, motionless. So do we consider the movement of the mountains with respect to the Earth. So, Glorious is He who says:

﴿وَرَىٰ الْجِبَالِ كَظُمٍ فَدُمِدُمْ وَفِي سُكُورٍ مُّنتَشِبٍ﴾

"And you will see the mountains and think them solid but they shall pass away as the passing away of clouds."

Hence, each of the sun, the moon and the Earth swim in paths or orbits that are exclusive to each of them.

The point of wonder in the Verse of the Qur'an is that the Verse points to the movement of the Earth on the basis of His saying, "but they shall pass away as the passing away of clouds," which only became known to science in the 17th century C.E.

The Glorious Qur'an says the movement of the Earth and the expressions are clear and concise as it is from the Wise and Well-Acquainted leaving nothing to doubt among the people who know logic. So, He, the Most High, says in a marvelous manner — the manner of the Qur'an:

﴿وَرَىٰ الْجِبَالِ كَظُمٍ فَدُمِدُمْ وَفِي سُكُورٍ مُّنتَشِبٍ﴾

صَدَقَ الَّذِي أَنشَأَ كُلَّ شَيْءٍ حَقًّا بِمَا تَعْمَلُونَ

"And you will see the mountains and think them solid but they shall pass away as the passing away of clouds. The work of Allah, who perfected all things, verily He is Well-Acquainted with what you do." (Soorah An-Naml 27:88)

The Verse proves that all the bodies that experience gravity (like the mountains and seas and the atmosphere among others) also rotate together with the Earth in its daily rotation on its own axis and its annual revolution around the sun. As a result of it, about a half of the

Earth experiences darkness in the night while about the other half witnesses daylight due to the Earth's rotation. However, this movement is not directly perceived because it is like the movement of the clouds in the sky.



The modern-day science has made it known that the night covers half of the Earth. And the rest of it where the day appears is the atmosphere covering the Earth which is like a thin peel. As a result, as soon as the Earth moves, the thin rays of daylight which were formed due to the reversal of the rays from the sun appear over various areas in the atmosphere bringing about the daylight. Thus the movement of the Earth brings about the appearance of the day from the night. And Allah, the Most High, says:

﴿وَمَآءٌ لَهُمْ أَيْلٌ فَلَمَّا دَنَا الْقَهْرُ بِإِنْفِاقِهِمْ تَطْلُبُونَ﴾

"And a sign for them is the night. We withdraw therefrom the day and behold they are in darkness." (Soorah Ya Seen 36:37)

ترجمہ: اور ان کے لئے ایک اور علامت ہے کہ جب ان کے انفاق سے روز کو ہٹا دیا جائے تو وہ اس کی تلاش کرتے ہیں۔



Earth's Gravity

Al-lah - The Most High - in *Surat al-Furqan* said:

﴿أَوَلَمْ نَجْعَلِ الْأَرْضَ كِفَاتًا ۖ﴾

"Have We not made the Earth a receptacle for the living and the dead?" (Soorah Mursasad 77:25-26)

The word *Kifalat* is derived from the verb *Ka-fa-lu* = *Yak-fu-lu* = meaning, to attract it and grab it and bind it. So, one of the attributes of the Earth is that it attracts, grabs and binds. These Verses clearly point to the gravity. It is everywhere in the Earth with which it and by the weight of objects is their only attraction toward the Earth which is also related to the mass of the Earth.

An object that weighs a hundred kilogram on Earth weighs a sixth of that on the moon, a man whose weight on Earth is sixty kilogram would only weigh ten kilogram on the moon. So the weight of an

object is by gravity toward the earth and the weight of an object on the moon is its gravity toward the centre of the moon. Allah Most High says:

﴿أَوَلَمْ نَجْعَلِ الْأَرْضَ كِفَاتًا ۖ﴾

"Have We not made the Earth a receptacle for the living and the dead?"

Now, the points to ponder are: how would life be without gravity? How would water settle on the surface of the Earth without gravity? And how will the atmosphere remain attached to the Earth without gravity? Why if not that the Earth pulls the atmosphere to itself, the latter would have been still while the Earth moves. And with the movement of the Earth and the thinness of the atmosphere, some large currents of high velocity winds (hurricanes or cyclones, etc.) of more than a thousand and six hundred kilometers per hour, and capable of destroying everything in the Earth would arise! Who made the

atmosphere attached to the Earth. It is certain that gravity is a pull. And who made the seas attached to the Earth by the impact of the gravitational pull?

The state of weightlessness is very difficult to bear.
Allah, Mighty and Sublime, says

﴿أَمْ يَحْسَبُ الْأَرْضُ عَرِشًا﴾

"Is not He Who has made the Earth as a fixed abode?"
(Soorah Al-Hamd 27:62)

Some Muslims might be reticent and say: stable and made things are steady and attached to something which would be impossible without the gravitational pull. Some have thought that in the end man will be pulled toward the Earth to be buried in it but Allah, Almighty, says:

﴿أَوَلَمْ يَجْعَلِ الْأَرْضَ مِثْقَالَ ذَرَّةٍ﴾

"Have We not made the Earth a receptacle for the living and the dead?"

Thus, the living is also attached to the Earth and attracted to it (as well as the dead) which refers to his weight on it.

Al-Fa'iq al-Sayid by An-Nabhan



Haphazard Zigzag Motion

Shaykh Zinqaani said: At one of the important world summits of scientists in Islamabad, one of the botanists in his paper said: A verse in the Quran which informed us of some facts more than 1400 years ago, is now known to us as theory. He said that in 1873, the British botanist Robert Brown discovered that when rainwater drops on the ground, the particles of the substrate rock are stirred - that is, as tiny particles (very small particles of diameters no greater than 300nm) begin a haphazard zigzag motion. These tiny grains vary in size and composition (they are, in other words, picked up randomly) in such a way that when the water drops on it, it ionizes the particles whose properties are a function of their original chemical composition.

The ionization (being dissociated into ions, an ion is an atom or a group of atoms that loses an electron and is as such called a negative ion or gains an electron and is referred to as positive ion) agitates the particles and water permeates into the crevices agitating the particles further. This haphazard zigzag motion has great benefits in that it



previous spaces within the closely packed layers is a water penetration which aids agriculture and also leads to the practical accumulation of groundwater.

shajr is from *shala* and *shala* meaning grows or increases. Even when there is permissible *Rabi* movement and prohibited *Rabi* motions, the direction here *shajr* refers to the movement in the size due to accumulation of water in the soil. As at various places which grow by reason of the accumulation of ground water. So that wherever the plants obtain water for a period of two or three months, barely from these reservoirs, the water would sink deep into the ground and the plants would die in a week. Brown said when the rains stop the granules are stirred.

Who discovered this? Robert Brown in 1827 C.E. and he named this haphazard zozzag motion of the granules as Brownian Motion. It is even when the granules moved before Brown. Simple observation that cause when compile the history of science it not mention Brown as the first to speak about this, rather they should say the first to mention it is the Qur'an as shall be shown below.

Allah, the Mighty and Sublime, says:

وَيَرَى الْأَرْضَ بَارِئَةً فَهَرَّجَ عَلَيْهَا فَاغْرَقَ فِيهَا مَاءً فَخَلَقَ مِنْ كُلِّ نَجْوٍ شَيْئًا

"And you see the Earth barren, but when We send down water it is stirred to life and it wells and puts forth every lovely kind of growth)." (Soorah Al-Hajj 22:5)

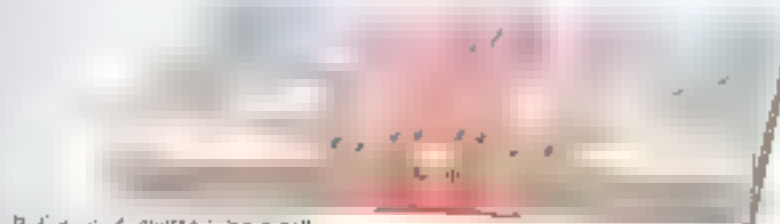
Who informed Muhammad peace and the status of Allah be upon him this precise information? Who informed him of the secrets in the oceans and the Earth and various levels of the atmosphere above the secrets in the heavens the commencement of creation? Who informed him of all these? In the Qur'an the greatest miracle!

If you were to see the staff of Moses peace be upon him changing into a moving serpent you would have seen a single Sign but as for the Qur'an all of the Signs and every Verse in it proves a source Allah Most High says:

قُلْ عَسَى أَنْ يَكُونَ مَعَكُمْ حُكْمٌ مِنْ رَبِّكُمْ وَأَنْتُمْ لَا تَعْلَمُونَ

"Say (O Muhammad): 'What thing is the greatest in witness?' Say Allah (the Greatest) is Witness between me and you; this Qur'an has been revealed to me that I may herewith warn you and whomsoever it may reach" (Soorah Al-An'am 6:19)

O Allah, I have conveyed (your message). O Allah, bear witness to this!



B. Effect of water on soil



C. Effect of water on soil

Summary

When water drops on the particles of the soil they vibrate and reveal a haphazard zozzag manner meaning that the ground (Earth) vibrates. "It vibrates" and the process of water penetration through in the knows any other dimensions of the particles is increased and so through other particles implying that "It swells" becoming expanded and relaxed for the preservation of water necessary for the growth of the plants and other organisms above and the vegetation germination from below the Earth's surface through the spreader's roots and the root hairs and with this the earth becomes what "puts forth growth"

and then the germination of plants on the Earth's surface grows higher and bears fruit as a favor and sustenance for the creatures. All these measures are organized as an argument and series of measures since this is the making of Allah Most High, who performs the creation of all things.

﴿ فَانظُرْ إِلَى ثَمَرِهِ إِذَا أَثْمَرَ وَرَيْحَ الْجَنَّةِ الَّتِي دُخِّنَتْ لَهُمْ يَوْمَ الْقِيَامَةِ فَإِنَّ إِلَٰهَهُمْ لَشَدِيدُ الْحِسَابِ ﴾

﴿ إِنَّ إِلَٰهَهُمْ لَشَدِيدُ الْحِسَابِ ﴾

"Look then at the effects (results) of Allah's Mercy, how He revives the Earth after its death. Verily! That (Allah) Who revived the Earth after its death shall indeed raise the dead (on the Day of Resurrection), and He is Able to do all things." (Soorah Ar-Room 30:50)



The Excellence of Makkah over other Localities

Allah, Most High, says

﴿ وَأَنذِرْ أُمَّ الْقُرَىٰ وَمَنْ حَوْلَهَا ﴾

"And so that you may warn the Mother of Towns (i.e. Makkah) and all those around it" (Soorah Al-An'am 6:92)

Ismail Ahmad and A-Tirmidhi reported from Abu Hurairah, may Allah be pleased with him, who said: The Prophet, peace and blessings be upon him, stood at Arafat and said: "I know that you are the best place on Allah's Earth and the most beloved of it to Allah, that the messengers expelled me from you, would not have I?" Al-Bazzaz said: Arafat is by the Hannat valley gate. And the report of A-Tirmidhi from Ibn Abbas, may Allah be pleased with him, says: The Messenger of Allah, peace and blessings be upon him, said: "How good are you of cities and beloved you are to me! Were it not that my kinsfolk drove me out of you, I would not reside in other than you." Abu Eesa said this hadith is hasan, i.e. good from this route.

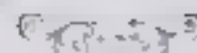
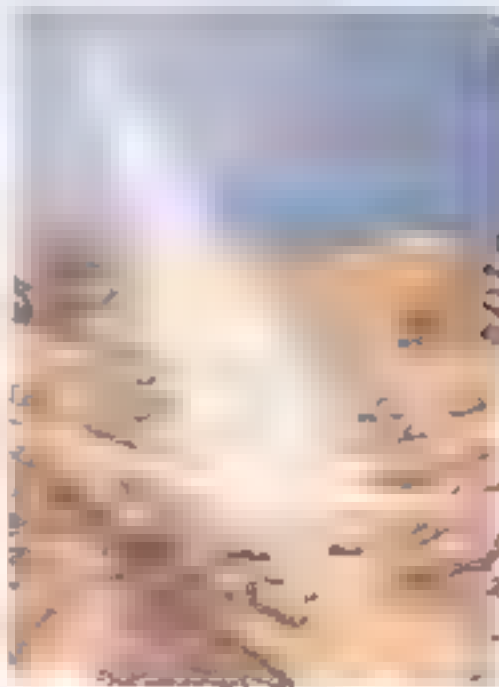


The new scientific discovery which had preoccupied the scientists and was announced in January, 1977 C.E. says: The Honorable city of Makkah is the centre of the terra firma. This newly discovered fact took years of scientific research and depended on complex mathematical charts for which the researchers sought recourse to computer simulations.

The Egyptian scientist, Dr Husain Kamaluddin, reported the story of the extraordinary discovery and said that when he started the research, his objective was completely different. He was researching a possible means of assisting disoriented travellers where they may lose the world in determining the direction of the Qiblah because he found out in his course of his many journeys abroad that this is a main problem faced by every Muslim whenever he is and particularly in a locality without a mosque or in a foreign land where happens to the tens of thousands of foreign students abroad.

Therefore, Kamaluddin thought of making new charts of the terrestrial globe to determine various directions of the Qiblah on it. After drawing the initial charts during the preliminary stages of his work, he prepared this map and delineating the five continents on it, this discovery became surprisingly clear to him that the location of the holy city of Makkah is at the centre of the world.

He told an example: the compass on the location of Makkah and moved the outer edge or the edges of all the continents and it became evident to him that the terra firma on the surface of an terrestrial globe is distributed around Makkah in an organized manner. And he found



Makkah - in the given situation - the centre of the terra firma. He prepared a new world map used since the discovery of America and Australia and repeated the procedure and he also found that Makkah is the centre of the world in every respect from a world leave world when the call to Islam started.

Kamaluddin added: I had started my research by drawing a map from which I can calculate the distance of every location on the Earth from Makkah and then I joined similar lines of longitudes so that I can know how the removal of the lines of longitudes and latitudes

will be with respect to the city of Makkah. Thereafter,

delineated the limits of the continents and other details on this grid of lines and the

work required a number

complex mathematical trials and computations with the use of computers in the determination of the distances and the required deviations.

The situation also required a computer program to delineate the longitudes and latitudes.

Due to this new removal, and by coincidence alone, it was discovered that I should be

able to draw a circle whose centre will be at Makkah and its borderlines outside the six continents and the circumference of this circle will move relative to the limits of the outer continents.

So, Makkah - by the ordainment of Allah - is the heart of the Earth and this is from what science shows in the discovery of the scientists that it is the centre of the universe or radiating magnetic energy which is supported as a wondrous phenomenon by the one who visits Makkah to perform the pilgrimage or the lesser pilgrimage with a repenting heart. He feels he is instinctively attracted to everything in

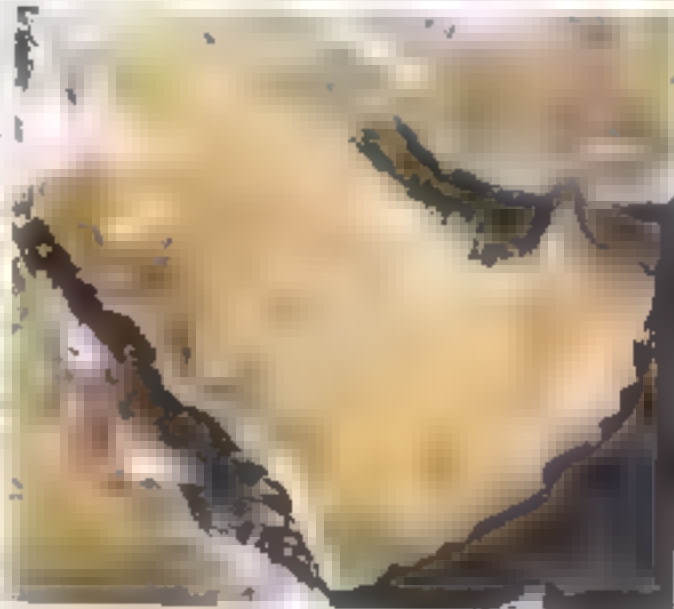


Peninsula – the Arabian subcontinent – was a vegetative land with rivers – this desert that you see – was a vegetative land, was it not?

He said: Yes, yes, yes, as you know, and I am not a prophet, I am only a geologist, so I know that there may be deep oceans and that evidence is that this land was pasturage with large streams and the evidences are many – just for me being a geologist, to your knowledge – the same town of Law – was discovered – from beneath it, same as a deserted area. And there are many evidences about that.

I said to him: Do you have evidence that the Arabian Peninsula will return as a pasturage with large streams? He said: This is established, but for we geologists know – we measure and estimate it and we are also – it says –

approximately when that will happen. It is a matter that is not far from you (the Arabs), it is near – said to him: How is that? He said: Because we have studied the Earth's history in the past and found that I passed



through ages and one of them was the ice Age. What does the ice Age mean?

I know that a great quantity of seawater in the form of snow – ice and snow accumulates at the northern Polar region and gradually moves southward and during the motion it covers whatever is below and narrows the water beds and thus any change in the weather is that which will happen in the Arabian Peninsula. So when the weather becomes cold the Arabian Peninsula will become one of the regions in

the world with the most rainfall and many rivers. I used to correlate the terminal streams and rainfall in the Abha region in the Arabian with the spots in Northern Europe.

Said: And

Zindani said: I was considering who he was saying and I said: When are you affirming that?

He said: This is a reality – is inevitable. I said to my student: Who informed Muḥammad peace and blessings be upon him regarding this? And all this is

mentioned in a *Hadith* reported by Maṣūm, in which he said: "The Last Hour will not come until the land of the Arabs returns as a pasturage and with large streams." Who said Muḥammad, peace and blessings of Allah be upon him, that the land of the Arabs was a pasturage with large streams? He paused and then said: The Romans

So, I said to him: Who informed him that the land of the Arabs will return as a pasturage and with large streams? He thought: Deep



and said: From the One above. At this, I said to him: Write... and he wrote... astonished by the scientific facts that have been in the Quran and Sunnah which were made by... except in the latter times with modern scientific methods. This proves that... the Muhammad peace and blessings be upon him... did not get to know this except through Divine revelation."

As Zaidi said: Honorable brothers, this is the position of a German atheist... consciousness has made... responsibility of the Muslim toward the religion and... the readers of the world accepting Islam if the facts are presenting to them... not just that they will accept Islam, rather they will... as well... propagate it... such... efforts to the Muslim community... and by the Islamic... for years we would not get... except that a third of the scientists in the world become Muslims.

By Allah, we did not spend more than two and half hours together... he saw all these things... and he is one of the scientific... writes that and affirms... This proves that there is only one scientific truth... and that Muslims have great responsibilities... have the truth in our hands... which is a... approach... from in front of it or from behind it. This is certainly a period where everything submits to science... at the beginning... the... of submission of science to Islam once the Quran and Allah... says.

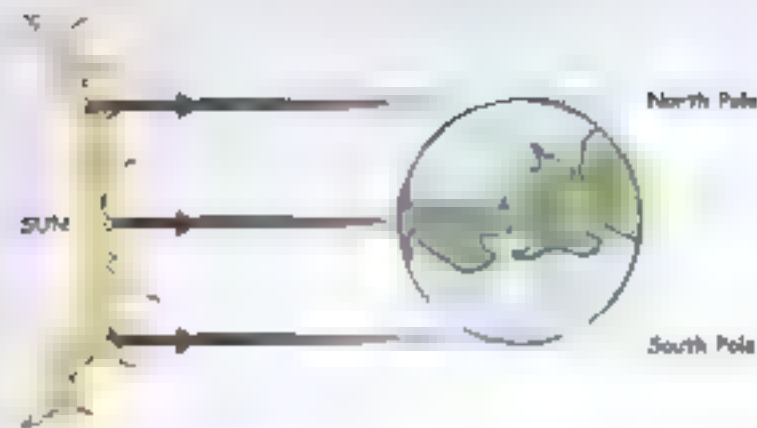
﴿سَرَبُّهُمْ سَائِلُ الْأَمْرِ وَلِأَنْفُسِهِمْ عَلَى رَبِّكَ نَهْمٌ قَدْ خَلَّى﴾

﴿لَرَأَيْتُمْ يَكْفَى بَرْقِكُمْ قَدْ خَلَّى عَلَى قُلُوبِهِمْ﴾

We will show them our signs in the universe and in their own selves until it becomes manifest to them that this (the Quran) is the Truth. Is it not sufficient in regard to your Lord that He is a witness over all things? (Soorah Fussilat 41:53)

﴿...﴾

- This is the future of the desert in the Arabian Peninsula, in southern Egypt and northwestern Sudan and perhaps other deserts in other regions in the world in the same... it should be a part...



of a period... as... in previous researches and... of the truthful and the trustworthy Prophet peace and blessings of... upon him... what the tremendous changes in the world's... over hundreds of years in front of us... confirmed by an expert American map analyst and archaeologist in Arizona in America, while... were... the... generated by the radar system mounted onboard the space shuttle Columbia. The radar photographs showed the presence of an area... under the desert sands in southern Egypt and western Sudan where the rain does not fall... except on an average... once every forty years but which has ancient large river channels some of which are larger than that of the Nile River.

Recently, some comparative studies have been made on the Arabian Peninsula where astronomical photographs show the presence of the river channel of a giant ancient river covering the peninsula from the west to the east toward Kuwait. Dr. Faarooq Al-Baz, the director of NASA... responsible for desert map... exploration and research initiatives... had mentioned the presence of a tremendous amount of atmospheric water in the channel of the ancient river which... on both sides of the river in the Holocene periods 5000 years ago. Far Maknoon, an American geologist... the return of the rivers to the deserts of the Arabian Peninsula and return of the water to the covered rivers.

Modern techniques confirm that the Earth is passing through an Ice Age which would last about a hundred thousand years and thereafter



will be a period of warmth referred to as an interglacial stage which will last between ten and twenty thousand years. This pattern has been repeated ten times over the last one million years.

The movement of ice in the northern parts of the globe affects the climate of the Earth leading to the replacement of the position of rains in the southward direction. As such, the Arabian Peninsula and the desert Southwest of the Sahara Desert in Northern Africa fall within the ambit of the rain-bearing westerly winds when they blow from Europe. That leads to the flourishing of the desert and it being filled with rivers and fertile valleys.

In the period of warmth between glacial periods, the ambit of the rains moves to the North, and the Arabian Peninsula and northern Africa come within the ambit of the trade winds (when trade winds move over warm tropical waters, they pick up moisture and bring heavy rainfall to the windward-facing slopes of mountainous areas) and it becomes covered by a climate similar to its present climate.

There are a number of evidences for the occurrence of such climatic changes compiled by Professor Austin Miler, the author of the book, *Historical Physiography*, as follows:

- Specific facts regarding the rains and other climatic evidences indicating the periods of dryness and what has been recorded by earlier researchers like Ptolemy in the second century C.E. in the scrolls of *Meteorology*.
- The data of freezing of water in some countries like Denmark since 1350 C.E.
- Difference in the distance between annual cycles to enable the growth of trees some of the trees are more than five or six thousand years old.
- Availability of evidence indicating agriculture in regions whose climate will not support agriculture.

The theories of the Scottish astronomer, James Kruik, in the nineteenth century posited these points which the Soviet astronomer, S. I. Ivan Viankovitch, reiterated after making a few modifications in the year 1941 C.E.

The climatic variations on the Earth will be referred to the ages that arise in three proportions associated with the movement of the Earth, as reported by the *Maqamat al-Sayid al-Buhārī* in the 6th edition in Muharram, 1421 A.H.

The first change was caused by the Earth's revolving around the sun on a circular orbit. Its orientation alters slightly so that the equinoxes, solstices and other seasons become slightly more or less orbit every a hundred thousand years. When the orbit is circular, the Earth receives a corresponding change from the sun's heat every day of the year. But when the orbit is elliptical our planet receives more in the year's closer to the sun and receives less heat from the sun's at another year when the major axis of the temperature varies is slight.

The second change is in the earth's axis, for the earth rotates around its axis which is inclined to its orbital plane. This means that in the rotational axis is the closest with the orbital plane, the rotational axis inclines to this plane by an angle which varies between 23 degs and 8 secs and 24 degs and 4 secs in a revolution of forty-one thousand years. This angle now is 23 degs 4 secs and it is still reducing.

The third change is in the movement of the Earth associated with its axis of rotation. This imaginary axis is delineated in space as a circle which is referred to as a precession, and the axis completes its circle in a cycle for twenty-three thousand years.

What a magnificent peace and blessings is portended by his reality in the noble Hadith where he said: "The Last Hour will not come until he and of the Angels returns as a punishment in the large streams." *Wa-ala-hu-s-salam* The question remains, who witnesses Muhammad, peace and blessings of Allah be upon him, regarding it this?



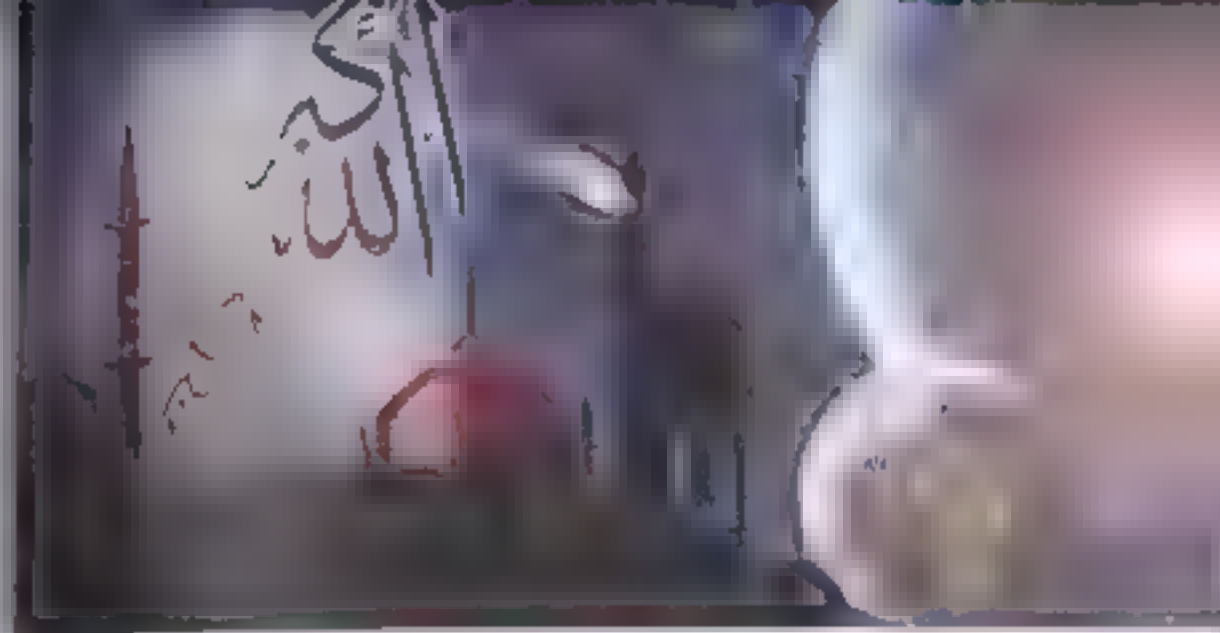
Imam Ahmad said: Yous narrated to us, (and Yousuf said), Hammad narrated to us, (Hudayf bin Asad) narrated that Abu Sa'ad bin Abd Allah in a cheque from Ali bin Abu Aqba that the Messenger of Allah peace and blessings of Allah be upon him, admonished the people and said:



"The Day of Rescue, and what is the Day of Rescue? (Thrice). And it was said to him, 'What is the Day of Rescue?' He said: The Dajjal shall come and ascend (Mount) Uhud. He will look at Madinah and say to his companions: Do you see this white castle? This is Ahmad's Mosque. And then, he will be coming to Madinah and will find an angel with an unsheathed sword on every of its (mountain) passes. He will go to the marsh of Jurf and hit its pavilion and then, Madinah will shake thrice. And there will not be any male or female hypocrite or a sinful person, male or female except that he comes out to him. And this is the Day of Rescue." (Saheeh li-Gayrehi)

Explanation of the Hadith: Sultan, that is, in his hand is a sword unsheathed. It is said: *awla as-sayf* when he removes it from its sheath. *Naqib*: a way in-between two mountains (a pass). *As-Sabidhah*, a land above which salt marshes grow and where nut-~~tree~~ grow plants except for a few trees. *Tum*, The basis of *Ar-Rum* is *Ar-Rum* in vibration and *Idharrah* (disturbance), i.e. it vibrates and resonates.

Conclusion: Consider the saying of the Dajjal: "This white castle is Ahmad's Mosque" and then consider the Prophet's Mosque: his photograph has been taken three times and the white tower is a main characteristic. Ponder over this and say "I seek refuge in Allah from the trials of the Dajjal."



The Miracle of the Call to Prayer and the American Astronaut

Abu Sa'eed Al-Khudri, may Allah be pleased with him, said: "The Messenger of Allah, peace and blessings of Allah be upon him, said to me:

"I consider you as the one who loves sheep and the desert, so when you are within your herd or in the desert and you call to prayer, raise your voices, for the extreme limit of the Muezzin's voice is not heard by a Jinn or a man or any other thing except that it bears witness to it on the Day of Resurrection."

That is, the one who hears the extreme limit of the Muezzin's voice or its prolongation will witness to it, what about the one who hears the call to prayer clearly? This of witness indicates its nobility and the degree of nobility: otherwise, Allah is sufficient as a witness.



Introduction and information

The first astronaut to land on the moon, Armstrong, pronounced his being a Muslim and was dismissed from his job and he says, "I lost my job but I found Allah."

The American astronaut, Neil Armstrong, the first man to step on the moon, announced his Islam. This has been published in Malaysian newspapers and a journal published in Ceylon (Sri Lanka) has quoted from it.



The story of his (conversion to) Islam, why? and how?

He reported it himself saying: This story dates back to many years while on a visit to Cairo during one of his visits around the world. While Armstrong moved around popular areas in Cairo, he heard the call for the *Dhukr* prayer from the mosques: "Allah is the Greatest! Allah is the Greatest!" He was astonished and began to ask about the voice.

His companions being surprised at his amazement said: It is the voice of the caller that invites the Muslims to prayer. But the astronaut did not respond to them. After some days, he announced to those around him clearly and without hesitation that

the statements of the call to prayer that rang in his ears, which he did not understand, were the same words he had heard when he had stepped on the moon for the first time!

Following his return to the United States, he dedicated himself to the study of Islam and he announced his Islam. After a while, he announced his dismissal from his job at the Space Center NASA, but from the strength of his faith, he said: "I lost my job but surely found Allah."

(Taken from a book *Why Those People Become Muslims* and some say it is not true and I was not able to verify. And Allah knows best).¹



¹ Neil Armstrong has many times reportedly but firmly attempted to suppress the impression that he has converted to Islam. Armstrong participated in the Global Leadership Forum in Malaysia on 6 September 2005. The *Star Malaysia*, a Malaysian newspaper, published an article about Armstrong's conversion on his recent landing mission in April 11. In the article, Armstrong made moon landing, published on 7 September 2005, contains this statement: "Armstrong, 75, also said he had been inspired to pray after his moon landing, converted to Islam."



ron is brought forth
from the outer Space

Air, Most High, Says

[illegible]

Indeed We have sent our Messengers with clear proofs and revealed with them, the Scripture and the Balance (Justice) that mankind may keep up justice. And We brought forth iron wherein is power in matters of war as well as many benefits for mankind that Allah may test who is best who will help Him His religion and His Messengers in the unseen. Verily Allah is All Strong Almighty. Soorah Al-Hadeed 57:25



- Geologists have discovered that 35 percent of the Earth's composition is from iron
- Iron is the most stable metal with a high density and as such, it preserves the Earth's equilibrium.
- Iron is characterized by the greatest magnetic property which is in compliance with the Earth's magnetism
- Iron originates from meteors that fall from space to the Earth. About a thousand meteors some of which may weigh up to tens

of tons fall from space and some of them were discovered in Israel and some in America.

- A single atom of the metal, iron, cannot be formed except at very high energy four times greater than that of the sun.

Scientific Explanations

Allah, Most High, says:

[illegible]

Indeed We have sent our Messengers with clear proofs and revealed with them the Scripture and the Balance (justice) that mankind may keep up justice. And We brought forth iron wherein is power in matters of war as well as many benefits for mankind - that Allah may test who it is that will help Him (His religion) and His Messengers in the Unseen. Verily Allah is All-Strong Almighty." (Soorah Al-Hadeed 57:25)

The Qur'an mentions in this noble verse that iron was brought from outer space and that it was not on the Earth. The scholars of athen have also mentioned this fact as said in their explanation on its power and benefits. As for science, I did not know this until the early sixties when space scientists discovered that the origin of iron is not from the Earth but from outer space and that it is from the remains of nucleors since the atmosphere deflects some of them to ashes in the bid to get into the Earth's atmosphere and the rest of it falls in different forms and sizes.

Space scientists discovered



later that the iron cannot be formed within the Solar System, the sun is a star whose heat and energy is not sufficient to form iron. This has given rise to the so-called 'cosmic iron' hypothesis, which states that the iron is formed in other stars and then comes to the earth through the comets and meteorites.

The astronomers now accept that the meteors and meteorites are fiery masses of rock from space from particles of different sizes formed in the same way as the meteorites. This is the first meteor known to man on the Earth's surface since it fell from space as meteors.

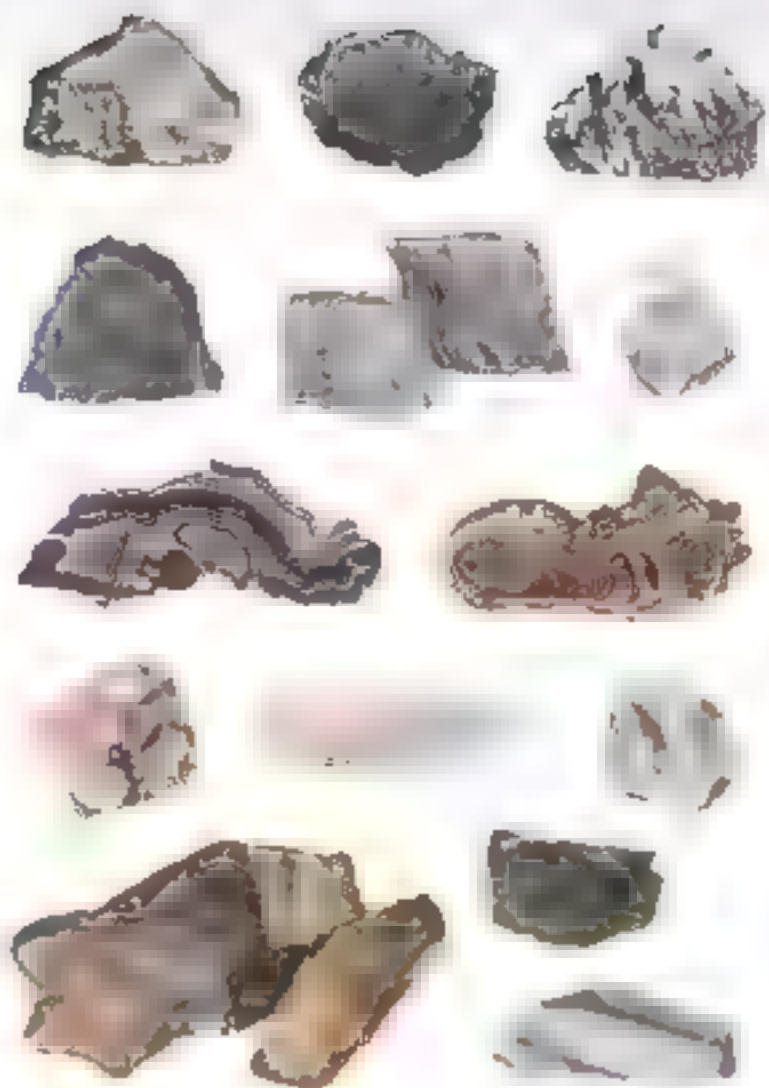
Arthur Barz said in his book *The Earth*: Meteorites are divided into three types depending on their composition.

- Iron meteorites - composed of about 98 percent iron and a small percentage of nickel and traces of other metals such as cobalt
- Stony iron - about a half of it is iron and nickel and the other half is from silicate
- Stony meteorites - which consist of largely of silicate minerals

Thousands of meteors have been falling onto the Earth's surface and some of them sometimes weigh up to tens of tons. In 1902 C.E. a meteorite was found in the United States which weighed about 62 tons with some iron and nickel contents. As for the one at Arizona, it was called the Arizona Meteor crater. It was produced by a large meteorite. The crater is 600 m deep inside is 400 m and about 1,300 m in diameter. The quantity of iron meteorite which is left in the fragments weighs tens of tons.

From this scientific explanation, the precision of the Qur'anic description becomes clearer - "we brought forth iron" But what is it - a power and what is its use? It is said that the Qur'an refers to the sword. "We made the sword a sign of war and a means of defence for mankind?"

Chemists say that iron is the most stable metal and this was not known until recently from the discovery of a metal with the properties of iron in its strength, ductility, and ability to withstand stress. It is also considered the densest metal and this property is useful in the earth in the preservation of its equilibrium. Also, about 5 percent of



The Earth's composition is iron and it is the non-magnetic metal which assists in the preservation of the Earth's gravity.

In the pre-sense, mankind did not realize the great industrial use of iron until the eighteenth century. That is, two centuries after the revelation of the Quran when man suddenly turned toward the industrial use of iron and discovered simpler means for its extraction.

Now, iron has found basic usage in about all sectors of industry and has become an intermediate in every industry. It is used as a basic material in the production of weapons and in all heavy and light materials.

Iron is also a basic component in most living things, for example, iron is a constituent which absorbs oxygen from the soil and the hemoglobin - the iron-containing protein in our blood - in all human beings and other animals that transport oxygen around the body.

We will close our discussion on iron with some wonderful numerical coincidences mentioned by Dr. Zighoud An-Nagar - an eminent geologist - when a professor of chemistry in Australia called his attention to the fact that in *Sura Al-Asr* (the chapter on iron) it includes with the Relative Atomic Mass of the element iron (56) and its Atomic Number (26) with the number of Verses in the *Sura* (chapter - 26) Glorious is Allah, whose angel Mahamud peace and blessings be upon him, all these scientific facts?

It is surely the Lord of the Worlds, Creator of the Universe who said in His Noble Book:

﴿لَقَدْ أَرْسَلْنَا بِرُؤُوسِ رُسُلٍ مِّنْهُمْ الْكِتَابَ وَالْقُلُوبَ وَالْأَفْئِدَةَ﴾

وَرَأَى الْغَيْبَ بِهَاسَأْنٍ سَدَّ وَسَفَّعَ السَّاسَ وَبَشَعَ اللَّهُ مِنْ حِجْرِهِ وَرَفَعَهُ الْغَيْبَ إِلَى اللَّهِ قَوْلُ عِيسَى

"Indeed We have sent our Messengers with clear proofs, and revealed with them, the Scripture and the Balance (justice) that mankind may keep up justice. And We brought forth iron wherein is power in matters of war, as well as many benefits for mankind, that Allah may test who it is that will help Him (His religion) and His Messengers in the Unseen. Verily Allah is All-Strong Almighty" (Sura Al-Hadeed 57:25)

Scientific References

The *Encyclopedia Britannica* mentions that the origin of the Earth's formation from planetary accretions is a reliable hypothesis and the meteorites are likely models for the planets as they occurred before planetary formation. As such, it becomes apparent that the Earth is formed from the accumulation of small rocky bodies together with average assemblage of the stony meteorites. In any case, the process of

planetary accretions lead to chemical differentiation. Most of the sun had been returned to its metallic state and had sunk to the center to form the core together with a large quantity of siderophiles.

As for the chalcophiles which combine preferentially with copper, barium, and combine as oxides and in some cases with silicates, as is the case of the organic substances to settle at the surface of the Earth's outer crust and at the crust in the same manner the chalcophiles form compounds like sulfides at very high temperatures within the Earth.

This original geochemical differentiation of the Earth can be described systematically as iron, magnesium, silicon, oxygen and sulfur because these five elements constitute about 95 percent of the Earth's composition. Oxygen is not found in a sufficient quantity so that it combines with most of the metallic iron and magnesium and silicon. Since magnesium and silicon have greater affinity for oxygen than iron the remaining oxygen only combines with some of the iron leaving the rest as metallic iron and iron sulfides. As mentioned earlier the metals sank to the center to form the core with a great quantity of siderophiles.

- **Chalcophiles:** have strong affinity for sulfur.
- **Siderophiles:** they alloy steadily with iron.
- **Lithophiles:** silicate (and oxide) minerals.
- A continuous combustion of the substances results in a number of complex nuclear reactions through the substances formed from the burning of carbon and oxygen and these the original ones changed to substances with high combination energy like chromium, magnesium, cobalt and nickel. These reactions are generally given the name Silicon combustion because an important part of the process is the breakage of the silicon nucleus to form helium nucleus and subsequently to another silicon nucleus for the production of the other substances mentioned earlier.
- At the end, at temperatures of about 4×10^8 K there is the potentiality to approximately reach the nuclear statistical equilibrium. At this stage, despite the fact that the nuclear

reactions continue, every nuclear reaction and its reverse occur at relatively equal rate. Thus, there is no other change in the chemical composition.

- The gradual formation of heavy substances during the fusion reactions will reach equilibrium by disintegration and actually halt integration processes when the substances become black in the form of iron and other elements closer to it in the periodic table. When heating takes place, the heavy nucleus changes to a lighter one just as ionization of atoms occur when heated.
- The density at the core of the sun is about a hundred times that of water (and about six times the density of the core of the Earth) but the temperature is at least about $15,000,000^\circ\text{K}$ considering the fact that the pressure is at least about 10,000 times more than that at the Earth's core which is about 3,500 kilobar.
- The temperature of the sun reduces from $15,000,000^\circ\text{K}$ at the core to about $5,800^\circ\text{K}$ at its radiating surface.
- It is possible that the temperatures of the stars of lower masses fall drastically due to the sort of nuclear reactions that it can generate, but for the huge stars like the sun and those bigger than it, it is capable of generating chains of complex nuclear reactions as described earlier. The measure of time for star evolution is derived from the theory of star evolution which demonstrates that the stars with greater masses than that of the sun have probably completed their active life cycles in a short time relative to the period of formation of the universe from the Big Bang theory. This result would imply that the stars with greater masses than that of the sun and those relatively recently formed in the history of the galaxy possibly brought about some of the heavy elements seen today. As for the stars with lower masses than that of the sun, they do not play any role in this result.
- Iron which is the basic component of the Earth's core is the most common element on Earth with about 35 percent abundance.

Point of Wonder

The point of wonder is the name Verily of the Qur'an is the import of the words *an-nazil brought forth iron* which implies descent from heaven. This is what astronomical and geological studies have discovered in the second half of the twentieth century. (Aadatul *Al-Islamiyyah*, Al-'Ijaz Al-'Ilmi)

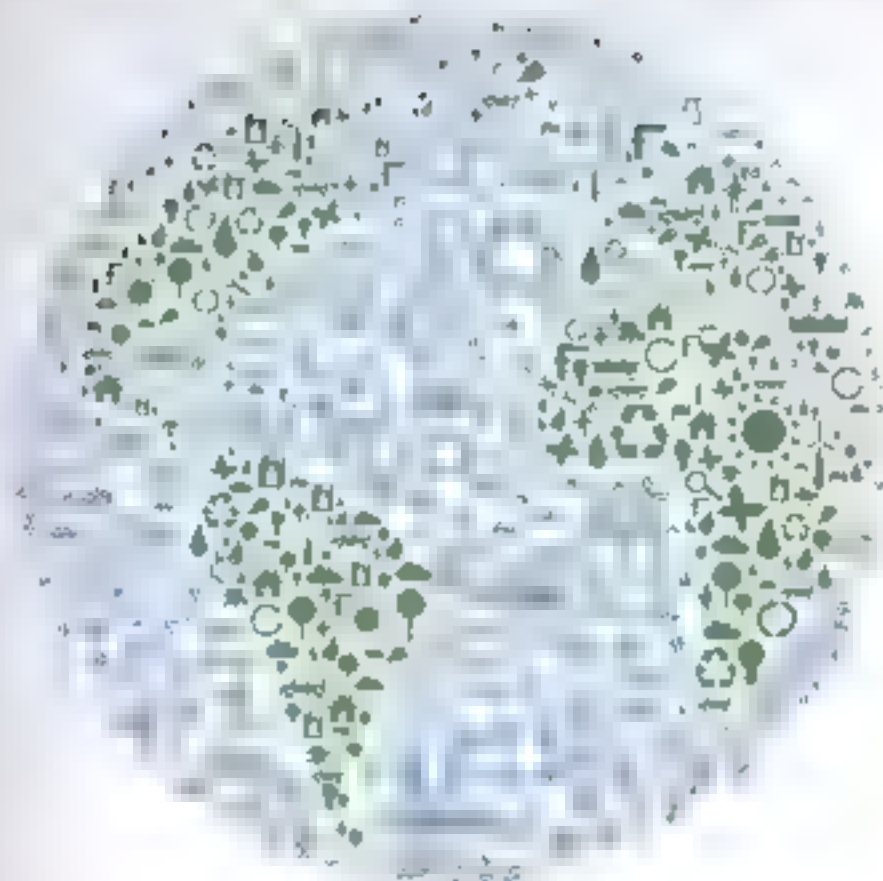
♦ Shaikh Ash-Sha'rawi said: During the World Summit on the Scientific Miracles of the Qur'an, Dr. Strauch, one of the most prominent scientists with the American space agency NASA said: We have carried out many researches on Earth's elements including laboratory studies. The single element that bewitches scientists is iron. The strength of iron has a unique makeup. The electron and neutrons in the iron atom require great energy to be ionized over four times as the energy in the solar system. As such, it is not possible that iron had been found on Earth. It is definitely a strange element that came to the Earth and had not been found on it.

﴿وَأَنزَلْنَا الْحَدِيدَ إِذْ يَاسُ سَمِيدٌ مُّسْفُوحٌ وَنُفِخَ فِيهِ مِنْ بَعْدِ وَرَقَةٍ مُّؤَلَّاهٍ سِيبِئًا ۚ إِنَّهُ قُرْءَانٌ عَجِيزٌ﴾

"And We brought forth iron wherein is power (in matters of war), as well as many benefits for mankind that Allah may test who it is that will help Him (His religion) and His Messengers in the Unseen. Verily Allah is All-Strong Almighty." (Soorah Al-Hadeed 57:25)

(An *Asbabul Ma'ad* by Shaikh Sa'eed bin Ibrahim)

♦ Shaikh Az-Zinjan said: Are you aware that the atomic weight (57) of iron is the number of Suraah *Al-Hadeed* (chapter on the iron) and that the atomic number of iron (26) is the number of the Verses in Suraah *Al-Hadeed*? If we consider the Basmala the phrase *Bismillah Ar-Rahman Ar-Rahim* meaning: In the name of Allah, the Beneficent, the Most Gracious as a verse? Well, it is just a coincidence...? But many of the people do not understand.



Sphericity of the Earth

The Qur'an is the Word of Allah, worship is performed by its ritual and will remain so until the Day of Judgment. That is, there is no conflict between it and scientific facts in the universe, because the Noble Qur'an does not and will not change. If such conflicts were to occur the cause of religion will be lost completely.

However conflict arises from two things: with not understanding the reality of the Qur'an or incorrectness of scientific hypothesis. So,

when we do not properly understand the Qur'an in such a way that we make interpretations that are different from its declared meaning, then then we should submit to the fact when the science of hermeneutics is taken into account, because that is our hope. It is not a very good understanding that is correct. We will give an explanation so that the people may know that not all of our understanding of the Qur'an could bring about conflict with existential facts.

Allah, the Mighty and Sublime, says in His Noble Book,

﴿ وَالْأَرْضُ مَبْدُوءَةٌ ﴾

"And the Earth We have spread out . ." (Sūrah Al-Hijr 75, 19)

For this means that the earth is spherical. But, if we understand the verse to mean this, we would include every one who speaks about the sphericity of the Earth as a sinner especially since by means of space-ship and satellites we now are able to see the Earth as a sphere rotating about its axis.

We say that anyone who understands the noble Verse – “and the Earth is flat” – to mean that the Earth is flat has not truly understood the intent of the noble verse of the Qur'an. Rather, the meaning encompasses the majestic miracle of the Qur'an and gives the obvious reality and scientific fact which was conveyed from the intellect at the time of the revelation of the Qur'an. When Allah, the Most Gracious, Most Merciful says: “and the earth is flat” – *al-ardha satta* – He says that is Earth is flat and does not spread out. Any Earth rather He means *al-ardha satta*. This means that – you get to any locality on the Earth, you find it spread out, meaning flat.

But if you are in the South Pole of North Pole in America or Europe or Africa or Asia or any location on the Earth, you see it spread out flat and this is not possible except when the Earth is spherical. If the Earth were in any hexangular or triangular or hexagonal or any other shape you would be on edge of it, you would see the flat area before you but you would see the edges and the same. As such, the only shape by which the Earth is spread out at every locality you get to is that it is spherical. If you continue from any point on the surface of the Earth

and you begin to move until you come back to the starting point, you will ever find the Earth spread out flat throughout the movement.

And this is the meaning of the noble Verse - "and the Earth We have made round" Some of the people have understood the earth to be spread out as evidence for the sphericity of the Earth, and this is a miracle in the Noble Qur'an. It comes with a single word to suit the purpose of reminding a man of things and concepts to its universal reality. For, those who are so ignorant of the meaning of this verse and heed it to mean that the earth is flat say that there is conflict between religion and science. And those who understood the noble Verse correctly say that the Qur'an is the first book on Earth that mentioned that the Earth is spherical and this fact alone is sufficient to bring about belief by they do not believe.

This is how we see the Qur'anic miracles: the One who revealed it is Allah, the Creator of Allah so when a part of the verse of the Qur'an refers to the earth's spherical and flat it states are in its own axis. In meanings of these verses cannot be harmonized except by putting these two facts together.

Can greater physical evidence be found that Allah created this universe? Then, He, the Most Gracious and Most Merciful, shows the minutiae of His creation to His creatures. So, He says:

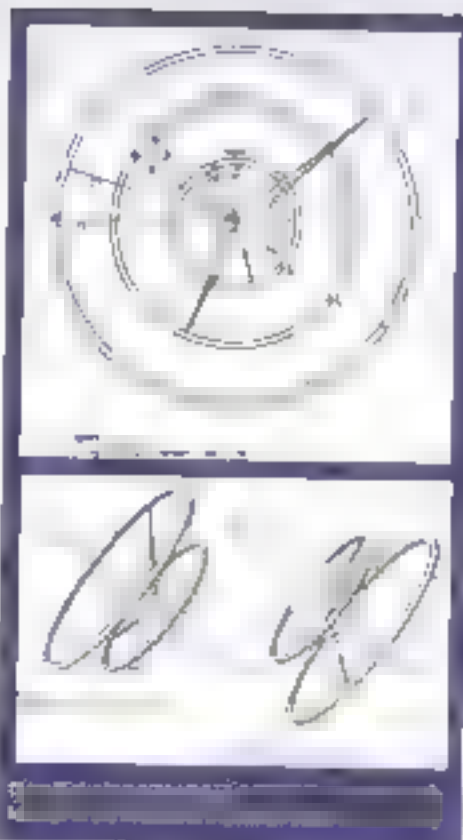
• على السموم : الأرض : الحق : نكي : قيل على النهج : وشيخ : الكهنة : على : قيل :
• وشيخ : تيسر : المصير : عند : مصر : لاجل : ليس : لا هو : المصير : المصير : •

"He makes the night to go in the day and makes the day to go in the night. And He has subjected the sun and the moon. Each running (on a fixed course) for an appointed term. Verily, He is the Almighty, the Oft-Forgiving." (Sura Az-Zumr 39:5).

That is how the Moon's High, crescent, and the night and day were both created in a new form. And since the night and day are observed on the Earth together it is not possible that they both occur at once except if the Earth is a sphere in view of the fact that a part of the sphere will be dark and the other half bright.

This is another fact from the Qur'an which mentions to us that a

half of the Earth will be bright and another half dark. If the night and day found on the Earth's surface are not equal in area in such a way that it appears as a thin thread while the other covers the most of the area, both will not really be like the sphere. The thin thread in this case will be rectangular or triangular or any other shape based on the area that it covers on the Earth's surface. And it is possible that the situation is as such based on the variation of the night and day but His saying, "He makes the night to go in the day and makes the day to go in the night," contains evidence that a half of the Earth will experience night and the other half, day.



When knowledge improves and man got to space and saw the Earth and its shape, it is found that, in fact, a half of it is bright and another half is dark as Allah, Most High, informs us.

Another evidence that the Earth rotates around its own axis is the noble Verse:

﴿وَيَوْمَ تَرَى السَّمَاءَ كَاسَ سَكَابٍ مَسكُورَةٍ﴾

And you will see the mountains and think them solid, but they shall pass away as the passing away of the clouds. The Work of Allah, who perfected all things, verily He is Well-Acquainted with what you do" (Soorah An-Naml 27:88).

When we read this Verse and we see the mountains before as stable

and fixed without movement, then we are astonished for Allah, Most High, says: "but they shall pass away as the passing away of the clouds." meaning that Allah has created and concealed from our naked eyes. It is only perception from Allah, the Mighty and Sublime, and the limitless ability of the Creator is because the mountains are included as a huge and not hidden from the eyes, for were the size of the mountains to be small, we would have seen through that our eyes do not see it properly or for its small size we could not really observe whether it moves or is stable.

But Allah, the Mighty and Sublime, created the mountains big, seen by anyone with the slightest ability to see in such a way that no one can see evidence that his sight is poor and not able to grasp small things at the same time. He told us that these mountains are solid, yet they will pass away as the passing away of the clouds. So, why has He, Most High, employed the movement of the clouds while describing the movement of the mountains?

This is because clouds do not move independently, they do not move from one place to another on their own, rather they move with the strength of the wind. Were the winds to stop motion, the clouds would remain motionless just like the mountains. Allah, the Mighty and Sublime, wants us to know that the mountains do not move independently, that is, they cannot change their location on their own. Thus, it is not that a mountain in Europe can move and after some time we find it in America or Asia. Its movement becomes established only by the wind. And since the mountains are found on the Earth's surface, no force will be seen moving the mountains except the Earth itself moves and then the mountains on it also move with it.

That is how the mountains appear to us - stable since they do not change location, but at the same time they move because the Earth moves around its own axis and the mountains are an integral part of it, so they completely move with it as the wind moves the clouds. Since we do not sense the rotation of the Earth, we will not also sense the motion of the mountains. Thus, His saying, "but they shall pass away as the passing away of the clouds" means that there is a period of time

between every period when it passes away. Thus is because the clouds are not permanently steady; rather, the rainy season will come and then the dry season and the period when the sun is bright but the movement of the mountains is similar to the sea and belongs to the same pass and over a specified period—indeed, the earth is filled with signs, but it is man that takes no heed.

When the non-Muslims are asked to attend the mosque to listen to the sermon, they are told that they have been asked to do so as a sign of respect for the Muslim community. The Imam of the mosque, who is a well-known and respected figure in the community, is the one who gives the sermon. The sermon is usually a call to peace and understanding between the different religious communities. The Imam also gives a message of welcome to the non-Muslims and encourages them to participate in the activities of the mosque. This is a very important part of the mosque's work, as it helps to build a sense of community and understanding between the different religious groups. The Imam also gives a message of welcome to the non-Muslims and encourages them to participate in the activities of the mosque. This is a very important part of the mosque's work, as it helps to build a sense of community and understanding between the different religious groups.

وَقَدْ قَدِّرْ الْأَثَرِ فَلَهَا ثَمَرُهَا ﴿٥﴾ لَوْ شِئْتَ لَتَمَنَّاهُكَ وَرَعَيْتَ مَقَامَهُ
كَيْفَ أَرَى بَالِي بِاللَّهِ وَالْمَلَكُودِ قَبْلَهُ ﴿٦﴾

“And they say: We shall not believe in you (O) until you cause a spring to gush forth from the Earth for us or you have a garden of date-palms and grapes and cause rivers to gush forth in their midst abundantly. Or you cause the heaven to fall upon us in pieces as you have pretended or you bring Allah and the angels before our face o face” (Soorah Al-Furqan 17:90-91).

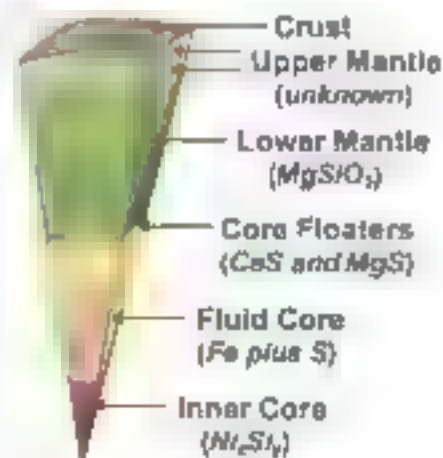
47. If this is not truly from them, or the verses revealed in the Noble Qur'an contain many miracles which should make them believe

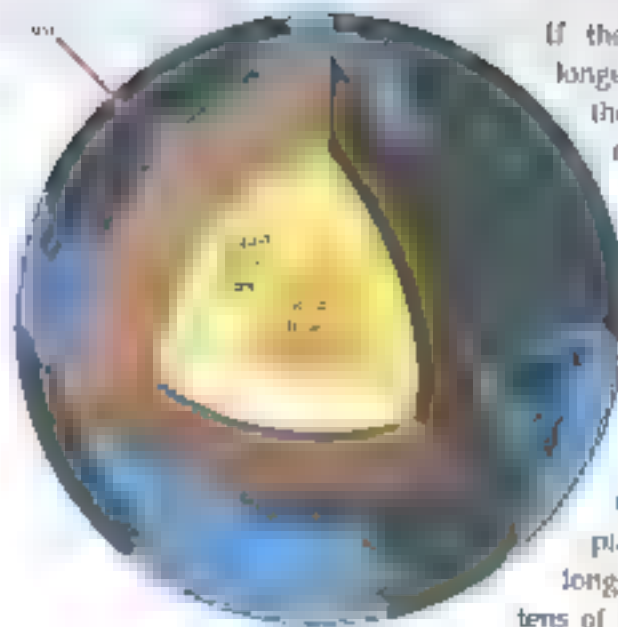
(5) Nothing in this article shall prevent a member of the bar from representing a client in a matter in which the member is not qualified to practice law.



The Earth's Layers

Geologists say that if the thickness of the topmost layer of the Earth increases by nearly one kilometer from its present thickness, all of the available oxygen will be consumed in the formation of the peroxide in the Earth's layer and as such, plants and animals will not be found anymore and carbon (IV) oxide will be in abundance. Oxygen composes 88.8 percent proportion by weight in seawater and the rest is hydrogen; if the quantity of hydrogen doubles while the Earth separates, oxygen would not be found and water would overflow at every point on Earth.





If the day were to be longer than it is ten times, the sun would burn every plant on the Earth's surface.

The question arises: who has measured the night and day on Earth to suit the life that exists on it? This is despite the fact that on some planets, the day is longer than the night by tens of times and on some of them a part will forever be day

and the other night (Az-Zindani)

♦ Dr. Muhammad Hashbushahy, the head of Department of Physics at Assiut Shams University says: Science has not found out what is meant by the "seven heavens and seven earths" but we could understand from the Verses of the Qur'an

﴿ لَمْ يَلِدْ وَلَمْ يَكُنْ لَهَا كَفِيلًا فَلَا يَمُوتُ وَلَا يَنُوتُ لَهَا يَوْمَ تَقُومُ السَّاعَةُ عِلَّةٌ لِّأُولِي الْأَبْصَارِ ﴾

﴿ إِنَّ اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ وَأَنَّ اللَّهَ قَدْ أَحَاطَ بِكُلِّ شَيْءٍ عِلْمًا ﴾

"It is Allah Who has created seven heavens and the Earth the like thereof: the seven: His command descends between them: heavens and Earth: that you may know that Allah has power over all things, and that Allah surrounds all things in (His) knowledge." Soorah At-Talaq 65:22

This means that there are six other Earths other than our Earth and that each has a heaven above it. The saying of our leader the chosen one, Muhammad, peace and blessings be upon him, confirms this

"Amulunnama Rabbi al-Samawati wa al-Arthi wa al-Bihar al-Khashi'ah

Ar-Rubbi al-Ma'aqulat" (O Allah, Lord of the seven heavens and what it overshadows, and the Lord of the seven Earths and what it bears) which also implies that every Earth has its heaven that tops it.

Allah, most High, says: "And of the Earth the like thereof (i.e. seven)" and the Divine commands mentioned in the Verse above, reveal something about which, there is no doubt, is directed to the discerning features of these six other earths which the scientists may discover in the future based on His saying:

﴿ وَمِنْ آيَاتِهِ خَلْقُ السَّمَوَاتِ وَالْأَرْضِ وَمَا فِيهِنَّ وَتِلْكَ آيَاتُ اللَّهِ يُعَلِّمُهَا مَنْ يَشَاءُ لِقَوْمٍ يَعْلَمُونَ ﴾

"And among His signs is the creation of the heavens and the Earth, and whatever moving (living) creatures He has dispersed in them both. And He is All-Potent over their assembling (i.e. resurrecting them on the Day of Resurrection after their death and dispersion of their bodies) whenever He wills." (Soorah Ash-Shu'ra 42:29)

This contains an indication of the possibility of the coming together of the worlds in the life of his world, of the hereafter, bearing in mind that the expression "All praises and thanks be to Allah, the Lord of all that exists" has been repeated in the Qur'an seven times: Soorah Al-Fatiha Verse 2, Soorah Al-An'am Verse 45, Soorah Yousuf Verse 10, Soorah As-Sajdah Verse 182, Soorah Al-Zumar Verse 75, Soorah Al-Hajj Verse 65, Soorah Al-Jathiyah Verse 36.

This coincidence further establishes what is mentioned above among the seven heavens and Earth. Moreover, in the last of the Verses is His saying:

﴿ يَوْمَ تَقُومُ السَّاعَةُ رَبُّ الْأَرْضِ رَبُّ السَّمَوَاتِ وَرَبُّ الْعَرْشِ الْعَظِيمِ ﴾

"So, all the praises and thanks be to Allah, the Lord of the heavens and the Lord of the Earth and the Lord of all that exists." (Soorah Al-Jathiyah 45:36)

That is, He is the Lord of the Worlds in the universe in addition to being the Lord of other worlds.

Written by Dr. Muhammad Amr Al-Hanba and
Miqdaad Mar'ey Al-Jawari

﴿الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ وَمِنَ الْأَرْضِ مِائَةً عَشْرَ عَشْرًا﴾

"It is Allah Who has created seven heavens and of the Earth the like thereof (i.e. seven). His command descends between them (heavens and Earth)." (Soorah Ar-Takwīn 65:12)

Aishah may Allah be pleased with her, said that she said to the Prophet, peace and blessings be upon him, said

"أخبرني عن سماء من سموات سبع سماوات في الجنة لا يدخلها أحد من أهل الدنيا ولا يخرج منها أحد من أهل الآخرة." (Reported by Al-Bukhari)

● It is discovered recently that the Earth is like a ball with seven layers

1. The atmosphere which is the mixture of gases surrounding the Earth

2. The Hydrosphere which consists of the bodies of fresh and salt water

3. The Sial - its name is coined from the first two letters of each of Silicon and Aluminium the two most abundant elements on earth and it (sial) is generally referred to the Earth's crust

4. The Sima - its name is coined from the first two letters of each of its major elements - silicon and magnesium and it (sima) is generally referred to as an envelope or cover

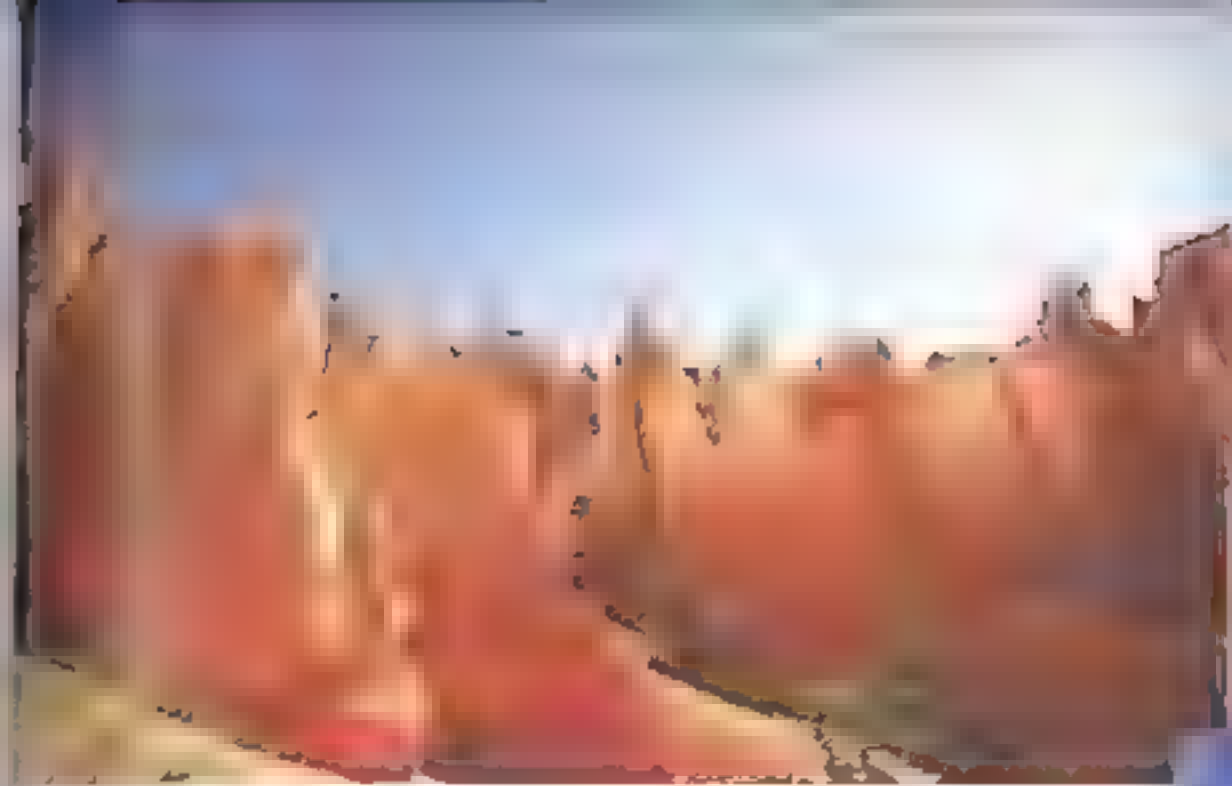
5. The layer of iron-rich Sima

6. The layer of Ni-Fe from nickel and iron

The nuclear core

● Scientific research about the last three layers has not reached a conclusive stage. And Allah knows best

10. HAFSAH BINT AL-A'ASIM



Mystery of the Mountains

Allah, Most High, says

﴿وَمِنَ الْجِبَالِ جُدَدٌ بَيْضٌ وَجُدَدٌ أَحْمَرٌ وَجُدَدٌ أَسْوَدٌ﴾

"And among the mountains are streaks white and red of varying colors and (others) very black." (Soorah Fatir 25:27).

The mountains are tremendously huge lumps from stones and rocks found in any place on the Earth's surface composed of the same materials. A great mass of rock forms upon another large lump - the Earth. This is what was known to the people about the mountains. However, advanced research has shown what is below the layers of the Earth. It was discovered that the mountains penetrate the first layer whose thickness exceeds 50 kilometers called the Earth's crust. It penetrates this layer extending its roots into the dynamic second layer

The second layer is in regular motion and the Most High has stabilized the crust above the oceanic layer because the mountains which penetrate into it in the manner pegs hold tents over the area below the tent. Similarly, pegs are used to hold up a mountain.

The researchers and those involved in the studies were greatly astonished when they discovered that this is already recorded in the Book of Araf, He, Most High, says:

﴿وَالْجِبَالِ أَوَاقٍ﴾

"And the mountains as pegs," (Soorah An-Naba' 78:7)

And Allah says,

﴿وَالْجِبَالِ أَوَاقٍ﴾

"And the mountains He has fixed firmly," (Soorah An-Naziat 79:32)

And He, Glorious is He, says:

﴿وَوَضَعْنَا عَلَى الْوُجُوهِ أَوَاقٍ﴾

"And has set on the Earth firm mountains lest it should shake with you," (Soorah Luqman 31:10)

And Allah says:

Mountains as Pegs

Dr. Zaghoul An-Najar said: Allah, Most High, says

﴿أَوَاقٍ﴾

"Have We not made the Earth as a bird, and the mountain as pegs?" (Soorah An-Naba' 78:6-7)

Here, I will comment only on the second of the two Verses despite its position at the end of the Surah and the one from which we shall take our discussion some other time, if Allah willing.

Allah Most High describes the mountains as pegs and this is a clear indication that these amazing signs are not only solid but also very high structures that we see on the Earth's surface - like most of the landmarks have described - but Allah informs with these expressions that the mountains have extensions into the lithosphere, as the pegs are buried in the Earth so that they can provide stability on Earth - a kind of the tent which they support, so as the mountains. This is what Earth science has affirmed recently that it has deep-rooted pegs to stabilize the lithosphere and by extension, the Earth. So what we see on the Earth's surface as mountains are only the rests of the huge masses of rocks which penetrate the lithosphere, bulks in the plastic asthenosphere and the thickest parts just like the ice sheets that float on the oceans.

Thus, the mountain extensions into the lithosphere are between 10-

15 times their height above the Earth's surface based on the thickness of the rocks making up the mountain and that of the material into which the pegs sink.

• So, a mountain whose specific gravity is 2.7 g/cm cube on an average like granite can sink below the similar rocks whose specific gravity is about 3 g/cm cube on average. As such a way, an dimensionally, the buried part reaches about 5 cm while the exposed part on the Earth's surface is about 1/10 of the total length.

That is how we have seen a single word – pegs – describing the two sections of the mountain – the upper and lower – and its basic cause of the Earth. Also, the word used in the Quran to describe the mountains is so precise linguistically and scientifically that it is currently used by scientists to describe the lower part of mountains concealed below the Earth.

Even when the scientists considered in the second half of the nineteenth century that it was possible that the mountains had pegs, they could not affirm this reality or the presence of lower extensions which stabilize the Earth against lithosphere until much later. We are at the beginning of the understanding of the structure and composition of those extensions and their function in stopping the vibrations of the Earth and the atmosphere plates in the domain of modern-day astronomy.

Its precedent – to describe the mountain as pegs – is considered clear evidence that the Noble Quran is the word of Allah (the Almighty and the Most Gracious, Merciful and Most Wise) upon Him is the Seal of the Messengers.

Description of the Mountains

Allah, Most High, says

﴿وَأَلْقَى فِي الْأَرْضِ رَواسٍ أَنْ تُبَدَّ يَسْكَمَ وَأَنْهَارًا وَرَوَاسٍ لَكُمْ تَسْتَوُونَ﴾

"And He has affixed into the Earth mountains standing firm, so that it should shake with you, and the rivers and roads that you may guide yourselves." (Soorah An-Naba' 16:15)

And He, the Mighty and Sublime, says:

﴿إِذْ خَلَقَ الْأَرْضَ يَهْدَا وَيُجَالِلُ الْأَنْبَاءَ﴾

"Have We not made the Earth as a bird, and the mountain as pegs?" (Soorah An-Naba' 78:6-7)

According to scientists in the nineteenth century, mountains were rising more than the height of their structure rising above the Earth's surface. Studies showed others and English scientists studied the Himalayas in 1864 and could not come out with any substantial conclusion. It has a puzzle called 'the Indian puzzle'. Further studies happened in referring to it as 'the mountain puzzle'. In the end, one of the scientists put forward an idea saying perhaps these mountains are pegs within the Earth. Thus, the scientists' scientific approach in their study and the following became known:

- The mountains have pegs penetrating through the Earth's surface at about 4.5 times its height above the Earth's surface.
- Its basic function was to stabilize it and maintain its equilibrium.

This mystery was not affirmed by researchers until the year 1966 as mentioned by Dr. Farooq Buz, a specialist in Earth science, whereas this mystery was already mentioned in the Quran more than 1400 years ago when Allah, Most High, said

﴿وَالْجِبَالُ رَوَاسٍ﴾

"And the mountain as pegs."



How the Mountains Formed

Allah, Most High, says:

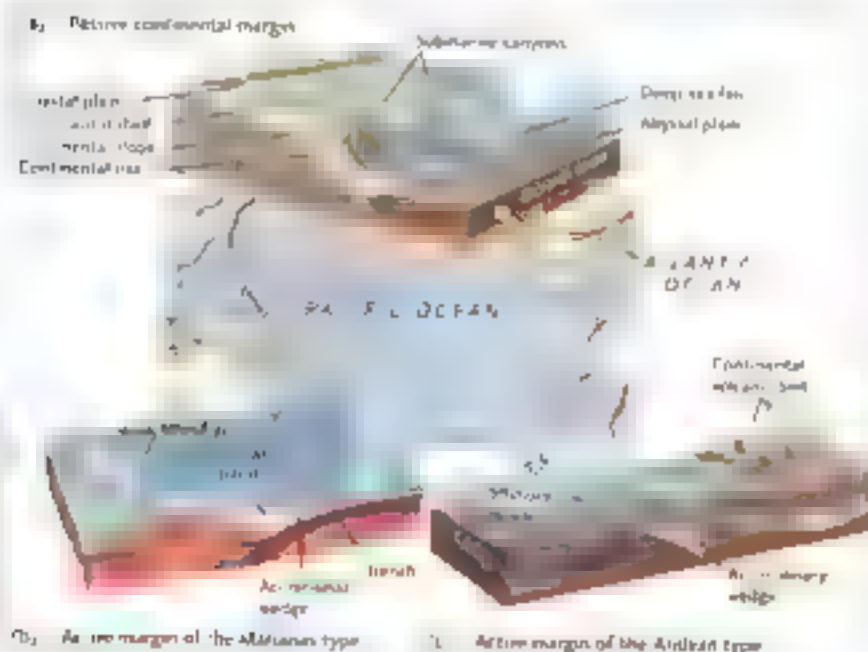
﴿وَأَنزَلْنَا مِنَ السَّمَاءِ مَاءً ثَبَاتًا فَاصَتْ بِهِ السَّيَامُ وَأَنزَلْنَا مِنْهَا نَهَارًا وَالْجِبَالُ سَوَادًا﴾

"And He has affixed into the Earth mountains standing firm lest it should shake with you and the rivers and roads that you may guide yourselves." (Soorah An-Nahj 16: 15)

And He, the Mighty and Sublime, says:

﴿وَالْأَرْضُ نَعْنَعَهَا وَالْجِبَالُ بِهَا زُرُوسٌ وَأَلْمَتَا فِيهَا مِنْ ثَمَرٍ كَثِيرٍ﴾

"And the Earth We have spread out and have placed therein firm mountains, and caused to grow therein all kinds of things in due proportion." (Soorah Al-Hijr 15: 19)



Allah, Most High, says:

﴿وَأَقْبَلَ إِلَى الْأَرْضِ يَدْرِينُ لِي تَهْبِطَ بِكُمْ رِجَالِي﴾
﴿يَوْمَ تَأْتِي سَاعَةُ يَوْمِكُمْ فَسُحِبْتُمْ﴾

"And has set on the Earth firm mountains lest it should shake with you." (Soorah Luqman 31: 10)

The word *qidd* (to plate)

Lon alms & Q: 1000, miracle

Earth scientists say that the formation of mountains on the Earth's surface achieved by placement which became complete

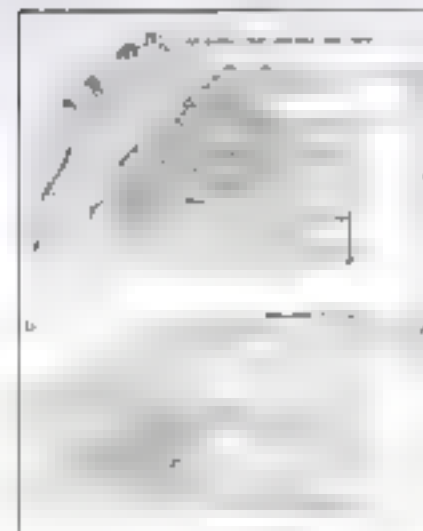
geological over long periods occurs from the bottom to the top. The oceans and seas extrude their contents to the seafloor by volcanic action or from the top to the bottom by the action of the seafloor and the gradual deposition of sediments.

Allah, the most High, says:

﴿وَالسَّمَاءِ وَالْأَرْضِ وَالْجِبَالِ وَالْأَنْهَارِ﴾

"By the sky which gives rain again and again. And the Earth which splits." (Soorah Al-Tariq 86: 11-12)

The movement of the Earth's surface below the crust is by the action of the ocean from the bottom to the top and this leads to the formation of mountains. It is scientifically established that the mountains extend about four and a half times below the Earth's lower layer. Alfred H. Miller, a German scientist and mountain geologist who was an atheist, was asked by some scientists during his visit to King Abdul Aziz University: "Where did Muhammad get all this knowledge?" And he answered: "There is no doubt that it came to him from above or below."



The Earth which Splits

Dr. Zaghoul referred to the Ayah

﴿وَالْأَرْضُ نَزَلَتْ﴾

"And the Earth which splits." (Soorah At-Tariq 86:12)

This Verse has come in the form of an expression of oath and we understand this oath shows the importance of what Allah, Most High, swore by and we ask regarding this Verse: What is the importance of having the Earth split?

Scholars of Tafseer in the past commented on this Verse and said these splits are the cleavages which form on the earth after extensive irrigation so that soils are formed for the thin green sprouts to issue from the earth after the seed is planted in the earth. The scholars have not

erred considering the fact that if you plant a seed it grows and becomes fully matured, then brings up a beautiful flower or a sweet fruit or exquisite wood. This penetration occurs during small cleavages in the earth after it has been slackened by water.

Faults on the Seafloor

Ceologists later discovered that the outer rocky layer of the Earth known as the lithosphere (whose thickness on the ocean floor is about 70-75 kilometers and below the continents at about 100-150 kilometers) is divided by a system of deep faults into twelve plates in addition to smaller plates called micro-plates or platelets. The plates float on the weak dynamic plastic layer known as the asthenosphere. The plates move toward one another (convergent plate boundaries) or away from one another (divergent plate boundaries) or slide past one another in opposite directions (without converging or diverging, i.e. transform plate boundaries).

If we consider the plates as rectangular, molten rock known as magma wells up (from tens of kilometers beneath the surface of the seafloor) from one of the sides of this rectangle (called a divergent

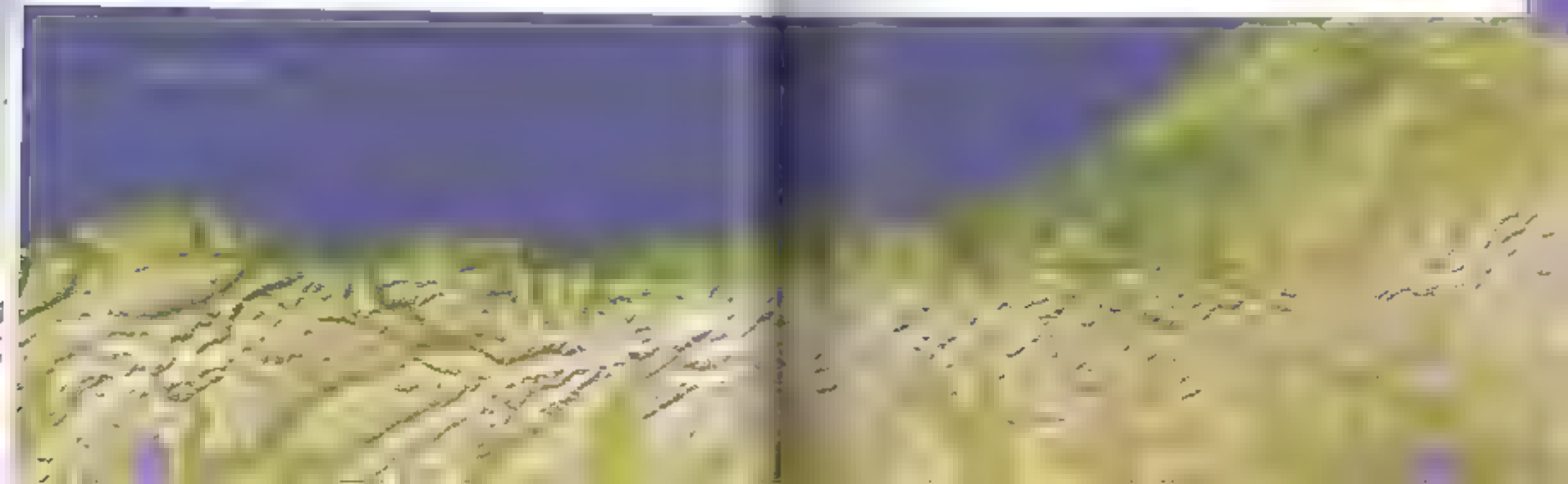




plate boundaries, producing enormous volcanic eruptions of a dark rock called basalt, forming new part of the seafloor. At the opposite side, a plate moves toward another plate near an convergent plate boundaries, and happens with great pressure on the asthenosphere with the same speed of formation of the seafloor on the opposite side of the divergent plate boundaries. The lithosphere also has a layer which develops forming a thick crust, the mid-ocean ridge and the oceanic crust system.

When plates break apart, the lithosphere rips and ruptures to form a divergent plate boundary. In the oceanic crust, this process is called seafloor spreading, because the spreading plates are spreading apart. A mid-ocean ridge and divergent plate boundaries create a series of deep valley depressions termed as the trench slowly spreading apart. On the other hand, convergent plate boundaries occur where plates are consumed or recycled back into the Earth's mantle. There are three types of convergent plate boundaries between two oceanic plates, between an oceanic plate and a continental plate, and between two continental plates. The convergent happens where the oceanic crust is thrust over oceanic crust or continental crust, and the subduction Zone. Many earthquakes occur in subduction zones, and volcanic ridges and oceanic trenches form in these areas in the ocean. Convergent plate boundaries occur where an oceanic plate descends beneath another oceanic plate. Trenches of active volcanoes develop 100 to 200

kilometers above the descending slab as magma rises from under the plate. When two continental plates converge, the incoming plate drives against and under the opposite plate. This often area is hundreds of miles of each continent and, at times, doubles the normal thickness of the crust. The convergent boundaries cause earthquakes and form mountains and plateaus.

When the plates slide past one another in opposite directions without converging or diverging, a transform plate boundary, also known as a transform fault system, forms. Usually simple, the transform faults are straight fault lines that form at a right angle to ocean ridge spreading centers. These fault systems can also connect spreading centers to subduction zones or other transform fault systems within the continental crust.

The Faults bring about the Continents

The process of the convergence, divergence and sliding past one another of plates described above is continuous and is not restricted to the oceanic crust, but occurs in the continents. The Mid-Atlantic Ridge is spreading at a rate of 3 centimeter per year and the East African Rift has a spreading rate of 6 centimeter per year. The collision of the Indian plate with the Eurasian plate has produced the Himalayan Mountains,

the Earth's highest mountain region, containing 9 of the 10 highest peaks in the world.

These faults on the continental crust that affect some tens of thousands of kilometers in all directions at depths ranging between 65-150 kilometers are



from the tectonic signs of the spherical of the Earth. These signs were not known until after the World War II and their evidences led to the theories of seafloor spreading and plate tectonics in the late sixties and early seventies in the last century.

The fact is a spear like a network in the fact regions which divide the globe and through the length of these faults, the processes of the convergence of convergent plates, sliding, where another of the oceanic plates take place. This also serves as the passage ways of the sea water near thermal plumes accumulated in the layer below the atmosphere (mantle) in a continuous but calm manner. The molten magma from the bowels of the upper mantle of the Earth due to its low density extrudes upwards in a number of volcanoes and deep-sea vents which aids in driving the generation of convection currents which in return bring about the movement of the lithosphere plates in convergent or a divergent or transformation when they slide past one another. In the divergent plate boundaries, as in the areas where the mantle materials in convection currents extend and the convergent plate boundaries occur where there is descent beneath.

The bowels of the Earth were far hotter than today due to the presence of great amounts of radioisotopes such as uranium, 235 and 238, and thorium. And the convection currents were a so much faster leading to faster activity for every accompanying phenomenon - geologic activity, earthquakes, and lithosphere plate movements and the movements that bring about mountain formation and high plate growth or what is called oceanic crustal volcanic growth and mountain building.



In the process, the atmosphere and hydrosphere absorb the gases that are released (out-gassing). In addition, continental growth above the deep oceanic trenches through the growth of volcanic arcs (and what is called the continental margin arc) also occur near the margins, or edges of continents and stress developed in these areas cause rock layers to fold, leading in earthquake faults, or breaks in the Earth's crust called thrust faults. The folding and thrust faulting thicken the continental crust, producing high mountains.



About 100 million years ago, the continents were in a supercontinent from where they are today and the convection currents in the earth's mantle brought about the movement of these continents until they joined in a single large C-shaped supercontinent 20 million years ago. It turned to as 'Gondwana' and the rest of the globe was covered by a massive ocean, enormous water mass that stretched from pole to pole and extended to about twice the width of the present-day Pacific Ocean at the Equator.

The lithosphere was like a covering that prevented the escape of heat from the bowels of the Earth, the accumulation of which later produced a network of great rivers at the middle of the supercontinent such that northern America and northern Africa separated about 100 million years ago, and between India and Europe and Africa about 100 million years ago. The separation of southern America from Africa followed that about 110 million years ago when the formation of Iceland started.

At the beginning of the process of breakup, movement of large bodies of water began to emerge in the form of large-scale interglacial melt, referred to as ice ages which gradually separated the 'Gondwana' into the hypothetical continental mass in Northern Hemisphere that included North America, Europe, and Asia called 'Laurasia' and 'Gondwana', or



Gondwanaland, in the south during much of the Mesozoic (145 to 66.4 million years ago). Laurasia consisted of North America and Eurasia north of the Alpine-Himalayan mountain ranges, while Gondwana consisted of South America, Africa, peninsular India, Australia, Antartica and those Eurasian regions south of the Alpine-Himalayan chain.

At the separation, which still continues – our continents became as we know them today and the first tectonic which brought about the first break was referred to as Mid-Atlantic Ridge. During this motion magma from beneath the Earth's crust and new oil wells up, cools and is progressively pushed away from the ridge's flanks. This phenomenon is evinced by the fact that the crustal material on either side of the Mid-Atlantic Ridge is increasingly younger than that farther away from the ridge.

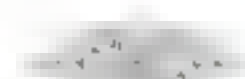
The oldest oceanic crust today is dated Mesozoic, that is, about 200 million years ago and it gradually gets submerged at the convergent lithospheric plate boundaries through the same process that led to the formation of new oceanic crusts. Numerous volcanic mountains are found on the continents like Mount Azarai (5,100 meters above sea level), Mount Etna (3,300 meters above sea level), Mount Fusiopsis

(1,300 meters), Mount Kilimanjaro (5,900 meters), Mount Kenya (5,100 meters), etc. These volcanic rocks are linked beneath with a network of deep faults penetrating the thickness of the lithosphere to reach the asthenosphere. It is at these faults that the break plates displace and move to relatively smaller masses.

Were it not for the Faults life will be impossible.

From the above explanations, we conclude that this great network of a system of faults that circulates the plates in tens of thousands of kilometers in all directions leads to the splitting of the lithosphere into a relatively big, medium, and small plates in addition to smaller plates. The rest of the plates are considered from the clearest evidences of the lithosphere and the probe would not be satisfactory without this because these faults are the causes for the absorption of gases by the Earth's atmosphere and in hydrosphere and for the formation and growth of elements, the growth of mountains and migration of the crust with new minerals in a systematic manner. They also function in the movement of the lithospheric plates and the gradual release of accumulated heat in the Earth's bowels.

Archbishop's son who had necessarily been named in his Noble Qur'an was one of the signs of its reality. Scientists did not pay attention to it until after World War II and did not properly understand it until late sixties and early seventies of the last century. As a result, the Qur'an is far ahead of science in mentioning a clear, established fact – more than fourteen centuries ago and this is one of the signs that since the origin of the book and the truthfulness of the Prophethood of our leader, Muhammad, peace and blessings of Allah be upon him.





The Relationship between Water and Rock Colors

The relationship is evident from the scientific miracles of Verses related to the water is Allah's saying:

﴿وَالرَّسَّارَ مِنْ رَبِّهِ مِنَ الشَّجَرِ مَا يُطْرَقُ بِهِ يَخْرُجُ مِنْ بَيْنِ يَدَيْهِ جُودٌ يَخْرُجُ
وَعُثْرٌ مَحْبُوفٌ أَوْ يُعْرَبُ شَوْدًى ۚ وَفَرْجٌ أُنْثَىٰ وَأُنْثَىٰ وَأُنْثَىٰ وَأُنْثَىٰ
وَعُثْرٌ كَذِبٌ ۚ﴾ [Al-Ankabut: 25-28]

"See you not that Allah sends down water (rain) from the sky, and We produce therewith fruits of various colors, among the mountains are streaks white and red, of varying colors and (others) very black And likewise of men and Ad-Dawabb (moving living creatures, beasts), and cattle are of various colors. It is only those that have knowledge among His slaves that fear Allah, Verily, Allah is Almighty Oft-Forgiving." (Soorah Faalr 35: 27-28,

The difference of colors is mentioned in three parts of these Verses To summarize the extensive research conducted on this subject the colors of rocks are a result of the colors of the minerals it is composed of And the colors of the minerals result from their chemical composition, its environment (of formation) and its interaction with water in such a way that water is the critical agent in the coloration of the rocks. Thus, Allah, the Mighty and Sublime, says -

﴿وَالرَّسَّارَ مِنْ رَبِّهِ مِنَ الشَّجَرِ مَا يُطْرَقُ بِهِ يَخْرُجُ مِنْ بَيْنِ يَدَيْهِ جُودٌ يَخْرُجُ
وَعُثْرٌ مَحْبُوفٌ أَوْ يُعْرَبُ شَوْدًى ۚ وَفَرْجٌ أُنْثَىٰ وَأُنْثَىٰ وَأُنْثَىٰ وَأُنْثَىٰ
وَعُثْرٌ كَذِبٌ ۚ﴾

"See you not that Allah sends down water (rain) from the sky, and We produce therewith fruits of various colors."

Each time science advances, it discovers an aspect of the scientific miracles of the Qur'an, so that we truly know that the One Who created this Qur'an created the universe and that scientific data





conform conclusively to revelation. This is because the revelation is Allah's Word and the universe is Allah's creation and thus, authentic science has to conform to revelation.

Therefore, I always say: the truth is a cycle, the lines of authentic narrations must meet with those of correct interpretations and the lines of authentic sciences definitely meet with the lines of uncorrupted nature and those of undistorted reality. So, we should definitely know that undoubtedly, the One Who created the universe is the One Who revealed the Qur'an.

Allah, Most High, says:

﴿أَلَمْ نَرِ أَنْزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ ثَمَرًا مِثْلَ الْقُرَىٰ ۚ وَبِهِ جَبَابٌ ۝﴾

"See you not that Allah sends down water (rain) from the sky and We produce therewith (fruits of various colors, among the mountains)."

Here, there is a conjunction; Allah, Most High, says:

﴿وَبِهِ الْجِبَالُ شُهُبًا ۚ وَحَسْبُ مَعْنَىٰ الْقَوْبِ وَتَرْجِيحُ قَوْلِ ۚ وَبِهِ سَمُورٌ ۝ وَاللَّهُ مُبْدِي قَوْلِهِ دَلَالَةً بِمَا عَمِيَ عَنْهُ مِنْ أَمْرٍ فَهَيَّأَ لَهُمْ قَوْلَهُمْ ۝﴾



"among the mountains are streaks white and red, of varying colors and (others) very black. And likewise of men and ad-Dawabb (moving living creatures, beasts), and cattle are of various colors. It is only those that have knowledge among His slaves that fear Allah. Verily, Allah is Almighty, Oft-Forgiving."

and "fayyumu" (it is only) implies limitation and restriction. Meaning - the one who has not learned does not have the means to fear Allah, if one wants to fear Allah in the right manner, one has no alternative to learning for Allah, the Mighty and Sublime, says:

﴿يَتَذَكَّرُ اللَّهُ لِمَنْ يَكْفُرُ الْفَلْسُوفَةُ إِنَّ اللَّهَ فَهِيمٌ عَلِيمٌ ۝﴾

"It is only those that have knowledge among His slaves that fear Allah."

meaning, only the learned ones truly fear Allah and none else except them.

Regarding the explanation of this verse, Ibn Kathir said: Allah, Most High, informs regarding the perfection of His Ability in the creation of various things from a single thing and that is water that descends from





the heaven by which fruits of various colors are produced from yellow to red to green to white. These are some the colors of birds as is known from its varying colors, tastes, aroma.

Allah says in another Verse:

﴿ وَفِي الْأَرْضِ ظُلُمٌ مَّتَّوِيَةٌ وَجُودٌ مِّنْ أَنْفُسٍ وَرِيحٌ عَرِيجٌ يُّسَوِّدُ الْبُحْرَ مِثْلَ مَوَاقٍ ۚ وَبِشْرٍ وَبِشْرٍ مِّمَّا عَلَى بَعْضٍ مِّنَ الْأَشْجَارِ أَتَوَاتٍ لَا يَتَذَكَّرُ إِلَّا أُولُو الْأَلْبَابِ ۚ ﴾

"And in the earth are neighboring tracts and gardens of vines and green crops (fields), and date-palms, growing into two or three from a single stem root or otherwise (one stem root) for every palm,, watered with same water, yet some of them We make more excellent than others to eat. Verily in these things, there are signs for people who understand." (Soorah Ar-Ra'd 13:4)

And His saying:

﴿ وَمِنَ الْجِبَالِ سُدًّا مِّنْ أَسْفَاطٍ وَخَضِرٍ وَبُيَاضٍ ۚ ﴾

"among the mountains are streaks white and red, of varying colors and (others) very black."

meaning and He created the mountains like that too with varying

colors as is also known from white to green and in some of them we find mountains of different colors. And this is also known from the different colors of the mountains of the world and the high black mountains of the world, and when the Arabs describe a black, they say black is ghambah.

And His saying:

﴿ وَمِثْلَ نَثَبٍ وَأَمْوَاتٍ وَالْأَنْعَامِ فَتَحْتِهَا الرُّعْدُ ۚ ﴾

"And likewise of men and ad-Dawabit (moving living creatures, beasts) and cattle are of various color."

meaning, likewise the animals amongst men and beasts - that is an animal that moves on four-feet and the livestock - by conjunction of a certain kind to the general. And we are of various colors, for amongst men are the Berbers the dark skinned Europeans who have light skin and hair and the Arabs are in between, and the Indians are darker and as such, Allah, Most High, says:

﴿ وَبِشْرٍ أَلْيَسَ بَعْضُهُمْ وَأَلْوَنُ بَعْضُهُمْ ۚ ﴾

"And the difference of your languages and colors." (Soorah Room 30:22)

Likewise there are the beasts and livestock with different colors even with in the same sort we have different colors. Even from the same sort of animals some will have one color and others will have another. So, Blessed is Allah, the Best of creators.

After that, Allah, Most High, says:

﴿ وَمِنَ الْجِبَالِ سُدًّا مِّنْ أَسْفَاطٍ وَخَضِرٍ وَبُيَاضٍ ۚ ﴾

﴿ وَمِنَ الْجِبَالِ سُدًّا مِّنْ أَسْفَاطٍ وَخَضِرٍ وَبُيَاضٍ ۚ ﴾

"only those that have knowledge among His slaves that fear Allah."



That is, those who truly fear Him are the scholars because the more the knowledge regarding the nearest He blesses to. If knowing, the One described with the perfect attributes and to Whom the best names are attributed increases, the more knowing one becomes perfect, the more His fear (in a servant) becomes greater.

Al-Hafidh Ibn Arabi, *al-Futuḥ al-Makkiyyah*, p. 100.

The House has a Lord guarding it

These were the words confidently repeated by Abdal Azzab, the grand father of the Prophet, peace and blessings be upon him, in the face of an enemy, a kick upon the Ka'bah, and transmitted from him across generations. Modern-day science confirms this Divine protection that is bestowed on the Hejaz region. Thus, it is not subjected to the environmental and physical disasters that affect its surrounding regions. Modern research in physical geography and geology has confirmed that this region will not be affected by any of the environmental calamities like earthquakes, volcanic eruptions and agents of desertification, despite such activities occurring in the zones around it.

The region of Hejaz, as explained by Dr. Talat Muhammad Abdulhassan, professor of physical geography at Al-Azhar University, is a part of the great African Rift Valley fault which had affected eastern Africa since the third geologic period. The rift starts from the Zambezi river between Zambia and Zimbabwe and Lake Victoria in Africa to the south extending through the Red Sea to the Gulf of Aden and the Indian Sea, ending at the Lake Tiberias and the Jordan River to the north.

Hejaz Region – An enclosed region

This enclosed region, as agreed upon from geographical, geological and petrophysical sciences, is at a stage known technically as "Rifted Breakup" that is characterized by the breakup of some parts of the Earth's outer crust from another, which implies that it is a volcanic region of great activity. That is further established by the vast volcanoes on its surface that deformed the surface of the Ethiopian elevation, but exposes numerous huge volcanic cones on its surface.



Allah's protection (over the region of Hejaz) becomes manifest in another form from the Red Sea at the Arabian Peninsula, considering that it was the site of a small scale volcanic eruption from which the volcanic rocks were formed, referred to by the Arabs as "Al-Harat". The Arabs had noticed these rocks from time and described them to be of stones burning with fire following flowing lava, and it is black.



with strange striking forms. The Harat are considered one of the most striking ground physiographic symbols in a rift traversing between eastern and western Hejaz such that even Al-Asma'i describes the region as though by his mentioning that Hejaz as "The region enclosed by the Harat".

Dr. Talat Abdub adds that between the early volcanic activity in Mesopotamia and a minor one in the Arabian Peninsula, the Red Sea region is a site of faults that cause drive active intense earthquakes. Thus, the Red Sea carries a large body of tectonic assemblage of many African lobes but filled with water from the Indian Ocean so that it becomes a sea or gulf in length, like an arm of the Indian Ocean.

Geological surveys carried out by the German scientists, Dr. von Corder, about the seismic waves on the seabed of the Red Sea, whose

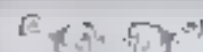
results were published in the *Magazine of the Royal Institute of Earth Science*, confirmed the presence of fault lines with basic volcanic rocks at their beds which implies that they continue to expel volcanic lava through its length till today.

In 1966, geologists measured the extent of the opening of the Red Sea with respect to the reef that runs perfectly at its middle as 2 centimeters per annum, which implies that the Red Sea is in continuous motion and expanding overtime in such a way that they agree that it will become an ocean in future and the natural rate of movement will increase due to volcanic activities and earthquakes.

Weak Form threatens H

The Hejaz region have witnessed some vibrations and tremors in the earth as mentioned in geographical and historical studies. Further establishing the geographical experiences is the point that through the high blocks of volcanic rocks connected to the bottoms of the Red Sea are found and likewise the group of crevices of the Qazam form described in the Qazam Sea known as the Red Sea because it extends longitudinally. The direction of its length and others of the Arabian Sea and connected to the African Sea because it extends transversely in the direction of its length and the Harat had penetrated its length in the valleys of Madinah like the long diagonal Apex Valleys and the transverse Humd and Qanat Valleys.

Geographical studies carried out by the researcher in 1979 point to the presence of lines of weak form passing by every region



of Hejaz, so that its rock composition is non-homogenous in such a way that hard rocks are placed on relatively weaker and fragile rocks, making the spaces susceptible to rock diapase. Thus one begins from the weak form since it is one of the Arabian Formations passing by the Al-Hejaz province and the highlands of Najd.

The signs of weak form extend along that line from the active flow of volcano (of Al-Harat) and from the appearance of faulting and rock indentations which imply that it is within the Hejaz region. In its transverse direction, a number of the spaces are susceptible to active movements and earthquakes which has protected the region from being subjected to what other adjacent regions experience of destructive earthquakes, such as the one that destroyed Madinah in Yemen. It is not clear repeatedly that joining areas of weak Arabian Suways and Fayoom despite the fact that Hejaz is a region that cannot be isolated from the Red Sea split considered part of the great African Rift.



Abd al-ibn Abbas (ra) Allah be pleased with him, reports
the majority of the scholars and the majority of the
said that the plants and clouds. This is also the position
of Qatadah and al-Lahak from the students of the Prophet's
companions. At-Tabar and Qatadah also mentioned the saying
Some of the scholars of Qatadah explain the saying in the plural
form of fertilize) is the plural of *laqit*, meaning - fertilizing the cloud and
good and its opposite is a barren wind.

Based on the first position, *saadit* is the plural of *saadit* and based on the second it will be the plural of *saadit*. There is
attraction between both, for the leader of the scholars of Qur'anic
exegesis, al-Lahak, has asserted to both positions together and that is
because the winds fertilize water and plants and by that it is bearing
supplements (poem) and by that it supplements
itself. Likewise, it is
supplemented by other
than it and its fertilizing
the plants is its action on
them.

Wind pollination is vital
for fertilization especially
for flowering plants that
do not attract insects.

Scientific explanation

Allah, Most High, says
in His Noble Book:

وَالرِّيحُ تَنْفُثُ دُونَ
مِنْ السَّمَاءِ مَا يَتَذَكَّرُ النَّاسُ مِنْهَا
أَشْجَارًا وَأَمْشَاقًا



"And We send the winds fertilizing (to fill heavily the clouds with
water), then cause the water (rain) to descend from the sky, and We
gave it to you to drink, and it is not you who are the owners of its
stores." (Soorah Al-Hijr 15:22)

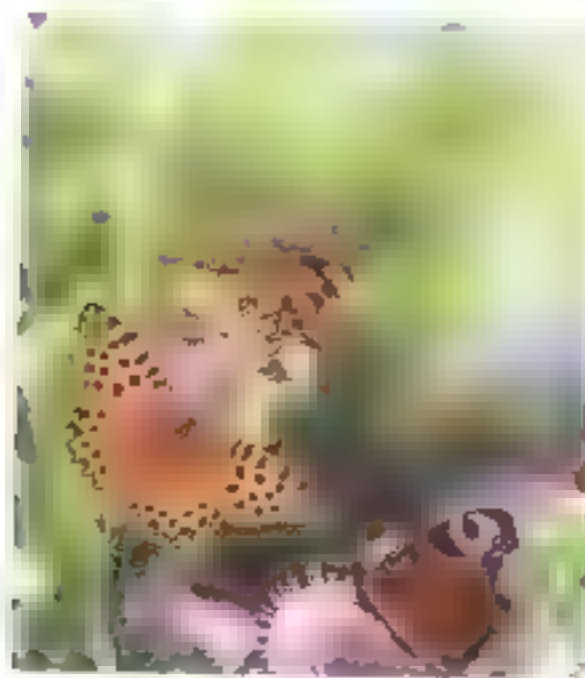
It is stated in the explanation of this Verse that the winds are the
fertilizers of the trees and the clouds and that is the saying of Ibn
Abbas (ra) Allah be pleased with him. He reports that
pollination is a basic phenomenon for fertilization and the production
of seeds, considering that the pollen grains are transferred from the male
structure of a plant to the female structure where fertilization takes
place. Pollination could occur between pollen transferred from the
stamens to the pistil within one flower (referred to as self-pollination)
and could be between different flowers of the same species (referred to
as cross-pollination).

The means of transfer of pollen grains vary from plant to plant
while some are transferred by man - as in the sexual unions of dates. For
example, there are three other methods:

- ♦ Pollen transferred by pollinators like bees, butterflies and other
insects and birds.

- Pollen transferred by water • Pollen transferred by wind (anemophily)

Winds have important roles in the process of pollen transfer in plants that do not have fragrance, or nectar or showy petals that attract insects since the winds transfer the pollen over distant places. For example, the pollen of pines which are naturally dispersed with a sac, could be transferred over a distance of 800 km although the grains may lose their viability in the process before it reaches the female structures of the plant and completes pollination. Other plants that rely on wind



pollination are the pine, stinging nettle, poplar and hazelnut.

The *New British Encyclopedia* mentions that the flowers in wind-pollinated plants may be placed very high on the plant and they may move easily in the breeze, shaking out the pollen, or the pollen containers burst open in an explosive fashion when the sun hits them, scattering the pollen widely into the air.

Are these scientific facts not corroborations to what is said in the Book of Allah

﴿وَأَرْسَلْنَا الرِّيحَ فَرْشًا مِّنَ الْمَاءِ فَأَمْطَرَ الْسَّحَابَ وَمِمَّا أَمْطَرْنَا مِنْ حَمِيمٍ ۝۲﴾

"And We send the winds fertilizing (to fill heavily the clouds with water, then caused the water (rain) to descend from the sky, and We gave it to you to drink, and it is not you who are the owners of its stores." (Soorah Al-Hijr 15:22)

﴿فَإِنْ يَرَوْا كِسْفًا مِّنَ الْكَوْكَبِ ۝۲﴾

Was Prophet Muhammad, peace and blessings be upon him, a Botanist to issue statements like these or is he the unkettered Prophet? Or did he receive lessons about plants when he was a resident of the forests more than fourteen centuries ago?

Scientific Reference

According to the *Scientific Encyclopedia* wind pollination is peculiar to plants that do not have fragrance or nectar or showy petals that attract insects, since a large amount of dry weightless pollen grains are produced and dispersed by the passing wind over long distances to reach the female structures of the plant. The large number of the pollen grains present in the wind can cause serious allergies in people.

The *New British Encyclopedia* mentions: To facilitate exposure of the stamens to the wind, flowers bloom before the leaves are out or spring. The flowers may be placed very high on the plant. The stamens often are long and droop in long arms or robes, so that a large area is available for catching pollen grains.



This division is evinced by the various forms of winds and the chain of their actions in the phenomena of cloud condensation and the stages of cloud formation from the impact on the water surface to the reflexion of water vapor and tropic ascension to its gradual movement, distribution and descent - whom and what Allah Most High, wiles.

He Most High, Allah the Most High, swore by the various forms of winds as is known by modern science:

﴿وَالرَّيْبَ مُرَ ۖ فَالْحَبِيبَ وَقُرْ ۖ فَالْحَبِيبَ ثُمَّ ۖ فَالْحَبِيبَ ثُمَّ ۖ﴾

"By (the winds that scatter dust And the clouds that bear heavy weight of water and those that float with ease and gentleness and those who distribute provisions rain and other blessings by Allah's Command)" (Soorah Adh-Dhoorah 51:1-4)

He Most High, swore by the winds that agitate the dusts and water vapor - *fa-l-habib* - then by the winds that carry the seas - *fa-l-habib* - and then by the winds that move with the clouds with every gentleness and ease - *fa-l-habib* - and then by the winds which divide the various rain-bearing clouds and distribute them on the earth as Allah Most High, wiles as rains, blessings or destruction and rain - *fa-l-habib* - (rain, and other blessings) by (Allah's) Command. What a wondrous concurrence between the results of modern science and the verses of the Noble Qur'an, in which the sequence of various stages of cloud formation appear like marvellously depicted scenery.

Modern science affirms the role of the winds in the impregnation of various forms of clouds with condensation materials and in the phenomena of negative and positive as the discharges in the cloud to prepare the conditions for rainfall. It also affirms the role of the winds in the transfer of pollen from male structures of the plants to the female structures to fertilize it.

Two cycles of fertilization:

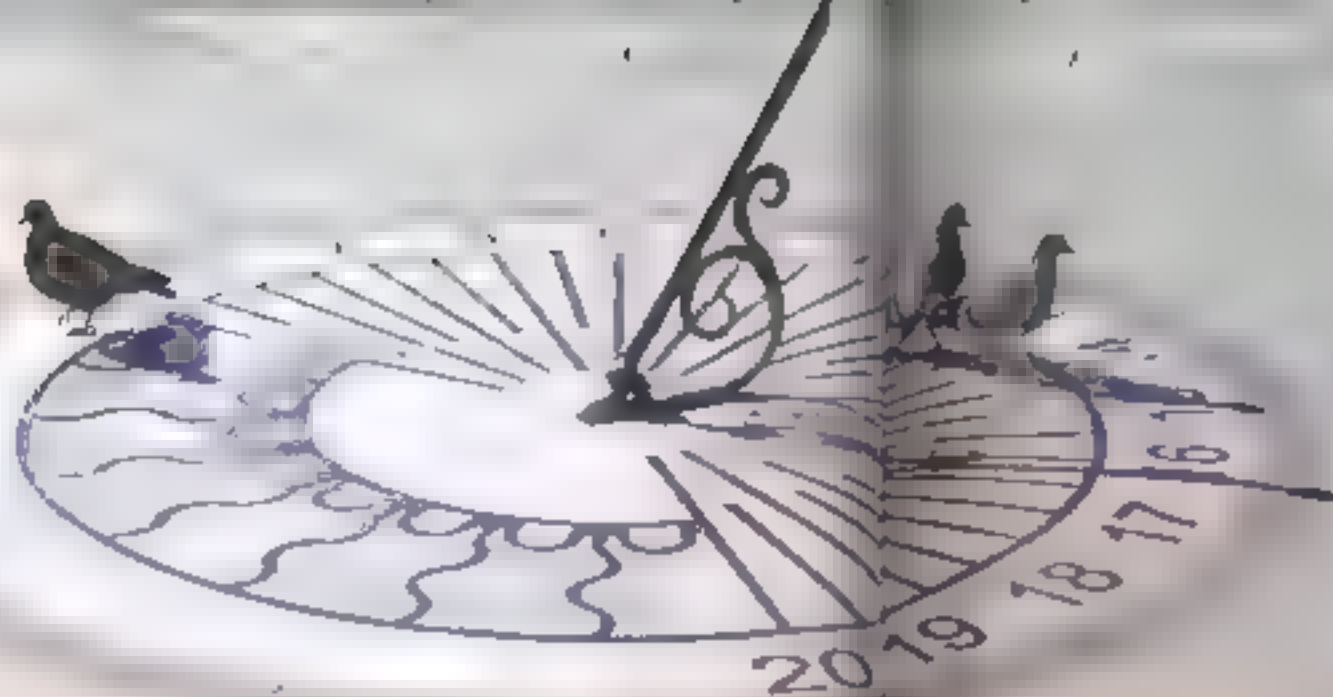
1. The first stage: Lightning is generated, which travels at a speed of 360,000,000 km/h and thunder 333 m/s with an interval of five seconds every mile and from this, the distance between an observer and the (lightning bolt) cloud can be estimated.

2. The seeds are formed and plants are pollinated by the transfer of pollen grains.

These two cycles are mentioned in the Qur'an regarding the (fertilizing) wind; Allah, the most High, says:

﴿وَأَرْسَلْنَا رِيحًا فَرَجًا لَّكُمْ فَاتَّبَعُوا لَهَا فَتَبَارَكُ وَجْهُ الْعَزِيزِ ۝﴾

"And We send the winds fertilizing (to fill heavily the clouds with water), then caused the water (rain) to descend from the sky, and We gave it to you to drink, and it is not you who are the owners of its stores" (Soorah Al-Hijr 15:22).



that the night is from the shadow of the Earth. The Verses invite to our considering the creations of Allah Who has perfected the creation of all things, as we observe in the shadow. He is the One Who created it, its means and limits, for if He, most High, willed He would change its characteristics and make it still without motion or make it disappear altogether, as it occurs in some stars. Like Neptune (Utaard) for example, the nearest star to the sun, its night is always night and its day is always day and shadows on it would be motionless.

Allah, the Mighty and Sublime, has made the sun as a mark for the shadow. Thus, through it (the

sun) the shadow is by most known and common. As this sign is from the Mighty and Sublime presented one of His signs in the universe and one of His miracles to our generation, the shadow

The Shadow (Refraction of light rays)

Allah, the Almighty, says:

﴿لَمْ يَجْعَلْ لَهَا سَائِبِغًا﴾

"Have you not seen how your Lord spread the shadow? If He Willed, He could have made it still then We have made the sun its guide [i.e. after the sunrise, it (the shadow) squeezes and vanishes at midnoon and then again appears in the afternoon with the decline of the sun, and had there been no sun light there would have been no shadow]. (Soorah Furqan 25-45,

The shadow here refers to the shadow in its general sense whether it is from animals or plants or man-made things based on the illumination.

﴿لَمْ يَجْعَلْ لَهَا سَائِبِغًا﴾

"Then We withdraw it to Us a gradual concealed withdrawal." (Soorah Furqan 25-46,

It is important to note that the shadow which is mentioned with the words "We withdraw it to Us a gradual withdrawal" is the shadow (images created by the light rays from the sun). As for the shadows (images) from a lamp, for example, or the glow of fire, it will not fall under the meaning of the Verse.

Allah, the most High, has not left the shadow that



rather he reduced it a bit and made it smaller & shorter, which is the proper explanation and understanding of the Verse. It is necessary that we study the phenomenon of refraction of rays as they pass through one medium to others with varying densities.

◆ Light rays travel in straight lines in a homogeneous medium with a particular density. When they hit another medium with a different density, it passes through it at a particular angle. It is possible after its entry, it travels bent appropriately based on the variation in density of the media. Most of us have observed this phenomenon when an object is placed in water. A stick dipped in water appears bent in the water, while the other one, upright in the air. If it is removed from the water, it is found straight and if returned it is found bent.

You may have wondered about the reason for this. The reason is that the rays of light refract as they move from the water to air due to the variation in density of the media, and so the stick appears bent.

◆ We return to the shadow formed due to sun rays. Rays emanating from the sun travel in space in straight lines until some of them hit the Earth's atmosphere. As it has a relatively higher density, the ray bends to travel in another straight line at a particular angle. Thus, we know that the phenomenon of refraction is a gradual withdrawal of the shadow.

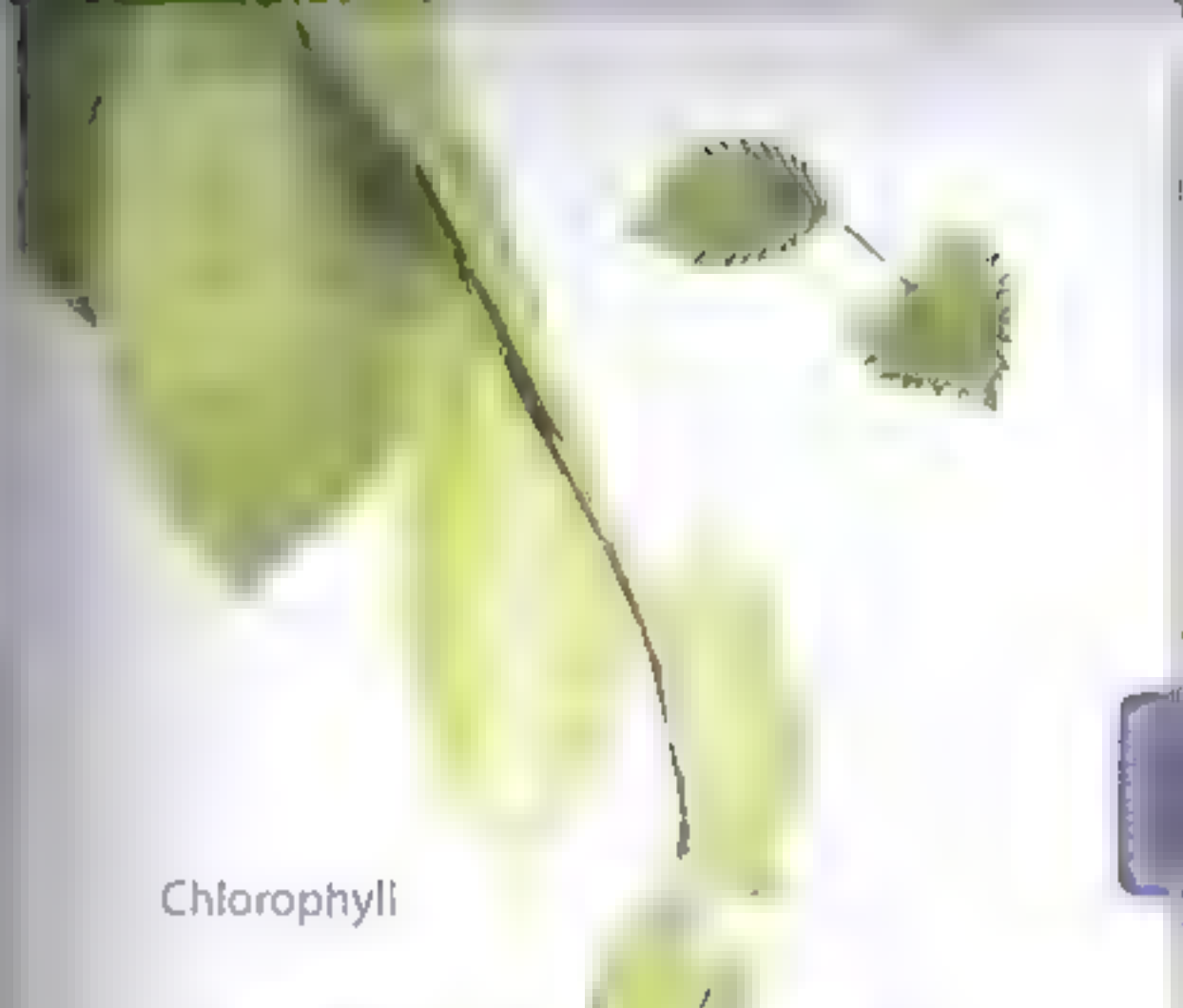
Dr. Zakaria, Director, Ministry of Education, Kuwait



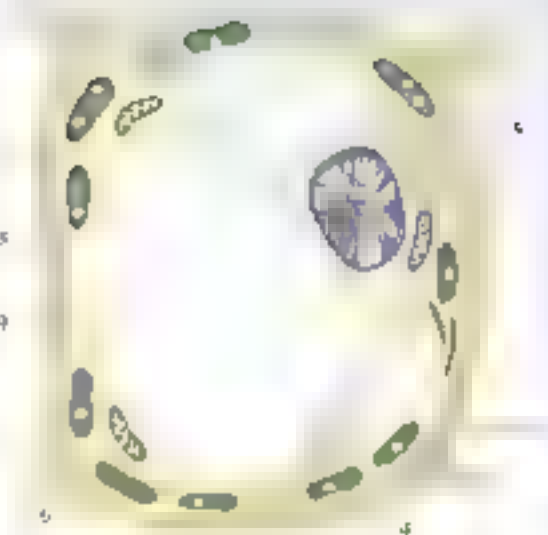
Chlorophyll

"Chlorophyll" is the only green pigment on Earth that produces food. It is the green pigment that converts energy from the sun's light and carbon dioxide and water to food for man and animals and this is referred to as "chlorophyll a". It has a different molecular structure and converts light energy from the sun, followed by a complex chemical reaction that produces sugar and then starch. Therefore, the basis of the formation of seeds and fruits is this green "factory". Thus, the question arises, who makes the plant grow? Who designed this system? It is Allah, the Mighty and Sublime. He says in His Noble Book,

"factory" on green pigment that energy, carbon and animals and this "Chlorophyll b" has and converts light energy from the sun, followed by a complex chemical reaction that produces sugar and then starch. Therefore, the basis of the formation of seeds and fruits is this green "factory". Thus, the question arises, who makes the plant grow? Who designed this system? It is Allah, the Mighty and Sublime. He says in His Noble Book,



- 1 cytoplasm.
- 2 nucleus with chromatin
- 3 mitochondrion
- 4 chloroplasts
- 5 chloroplast
- 6 starch grain
- 7 Golgi apparatus
- 8 endoplasmic reticulum
- 9 vacuoles with mucous
- 10 cell wall
- 11 medullary tissue



﴿وَمِمَّا يُخْرِجُ مِنْهَا مُتَبَعًا مِّنْ ذِي الْقُرْآنِ﴾
 ﴿لَا تَلْقَوْنَ فِيهَا قُلُوبًا تَلْقَوْنَ فِيهَا قُلُوبًا تَلْقَوْنَ فِيهَا قُلُوبًا﴾

"It is He Who sends down water (rain) from the sky, and with it We bring forth vegetation of all kinds, and out of it We bring forth green stalks every green thing from which We bring forth thick clustered grain" (Soorah Al-An'am 6:99)

Scholars of Qur'anic exegesis said *Kindran* means something green Ibn Al-Jawzi said regarding the Qur'anic Verse "from which" *Kindran* has two meanings the second from the plants and *Kindran* meaning - all green Az-Zamakhshari said "from which" means from the plants. Ibn Al-Khattab said means something green. Ibn Jarir said "from which" means from the plants. Ibn Al-Khattab said means something green. Ibn Al-Khattab said "from which" means from the plants. Ibn Al-Khattab said means something green. This was also the opinion of Abu Yusuf said and the two scholars.

Al-Allousi said Qurtubi and Ibn Hajar said We brought forth from the plants something green:

﴿وَمِمَّا يُخْرِجُ مِنْهَا مُتَبَعًا مِّنْ ذِي الْقُرْآنِ﴾

"It is He Who sends down water (rain) from the sky, and with it We bring forth vegetation of all kinds, and out of it We bring forth green stalks"

that is, from the plants we bring forth from it, meaning - from this green thing;

﴿لَا تَلْقَوْنَ فِيهَا قُلُوبًا تَلْقَوْنَ فِيهَا قُلُوبًا﴾

"from which we bring forth clustered grains"

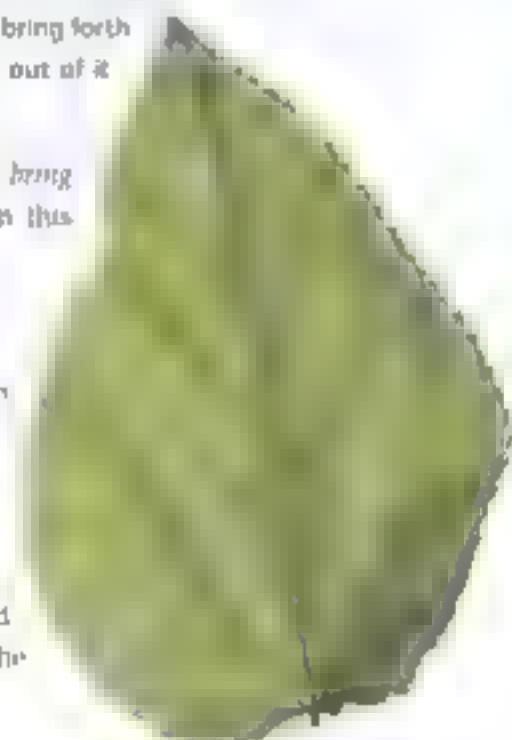
Ibn Al-Jawzi said: we bring forth from it, that is - from the green thing clustered grains like wheat and barley clustered such that some are above the other

Az-Zamakhshari said:

﴿لَا تَلْقَوْنَ فِيهَا قُلُوبًا تَلْقَوْنَ فِيهَا قُلُوبًا﴾

"from which we bring forth clustered grains"

meaning - from the green thing, clustered grains and these are wheat and barley see ponder along with them the way the scholars exegesis explain the saying Allah the Mighty and Sublime "from which" means from the plants. Ibn Al-Khattab said means something green. Ibn Al-Khattab said "from which" means from the plants. Ibn Al-Khattab said means something green. This was also the opinion of Abu Yusuf said and the two scholars.



وَمِنْهَا نَخْلٌ وَنَخْلٌ كَثِيرٌ مِنْهَا نَخْلٌ وَنَخْلٌ كَثِيرٌ
 وَمِنْهَا نَخْلٌ وَنَخْلٌ كَثِيرٌ مِنْهَا نَخْلٌ وَنَخْلٌ كَثِيرٌ

"And with it We bring forth vegetation of all kinds, and out of it We bring forth grain stalks from which We bring forth thick clustered grain. And out of the date palm and its spathe come forth clusters of dates hanging low and near, and gardens of grapes."

In these Verses, "Jannat" is in the accusative case, why? So that we can also bring forth potatoes, if grapes, onions and pomegranates are similar in kind yet different in variety and taste. We mentioned Muhammad peace and blessings be upon him, the mentioned people to speak about them in this given substance from which the plants come forth? There are some plants and from them something given is brought forth which produces the grains and seeds and fruits and other parts of the plants. We explained this in the previous verses. The question is: how does the given substance? We know it is a miracle, this knowledge is only from Allah, the Mighty and Sublime.

for: Raza Mirza al-Sayid by: Sharif Ali (al-Sayid al-Sayid)



Fear and the Rain

The first campaign Muhammad peace and blessings be upon him, engaged in was the mountainous battle between the Muslims and the polytheists. The Battle of Badr when the Muslims marched out in a small number in order to intercept a trade caravan of the disbelievers. Eventually the Muslims had to face a large strong army greater than them in number and equipment, and when the battle started the disbelievers appeared sure to be victors.

﴿لَا تَسْتَوُوا رَأَيْتُمْ فَلَانِ إِذْ يَقُولُ مُخْلِصُونَ أَنْفُسَهُمْ مِنْ الْمَوْتِ﴾

﴿وَمَا جَاءَهُمْ إِلَّا بِشَرٍّ رَأَيْتُمُوهُمْ يُرِيدُكُمْ﴾

(Remember) when you sought help of your Lord and He answered you saying "will help you with a thousand (if the angels came to be) and the other (following one another) in succession. Allah made it only as glad tidings, and that your hearts be at rest therewith." (Soorah Al-Anfal 8:9-10)

As soon as the Muslims began to see Allah's soldiers amongst them, their hearts became contented, and there is no victory except from Allah, not from the angels and not from man. Finally what happened? They were all overcome by sleep that Allah has made a blessing for man for when we sleep our bodies become replenished after exertion and tiredness. Allah, wishing to give us rest what is the best knowledge in such circumstances, made sleep overtake the terrified Muslims on the night before the battle all at the same time. Thus, every one of them slept deeply and their resolve grew strong, in fact some of the Muslims had wet dreams and became sexually impure by morning. Shaitan/Shaitan came and said



"How can you go for a battle while in the state of sexual impurity? How can you fight and then meet your Lord while sexually impure?"

Allah caused the machinations of Shaitan to fail and dropped rain from the heaven that they may purify themselves with and he nullified the machinations of Shaitan.

Doctors say that in the state of fear certain substances are secreted in the blood and the body shivers and is not stable as a result and one of the means by which the body stabilizes and can reduce the secretion of these substances is to shower water on the person. This condition



Allah, Most High, says

﴿وَلَا تُرِيدُكُمْ فِي الْقَتْلِ إِلَّا لِيُقَاتِلَكُمْ فِيكُمْ وَيُقَاتِلَكُمْ﴾

﴿لِيُقَاتِلَكُمْ فِيكُمْ وَيُقَاتِلَكُمْ فِيكُمْ وَيُقَاتِلَكُمْ فِيكُمْ﴾

"And remember when you met (the army of the disbelievers on the Day of the Battle of Badr) He showed them to you as few in your eyes and He made you appear as few in their eyes, so that Allah might accomplish a matter already ordained (in His Knowledge), and so Allah return all matters (for decision)." (Soorah Al-Anfal 8:44)

The disbelievers appeared sure to be victors because their numbers were small in number slightly more than one hundred. As for the believers, they were about a thousand including about five hundred horsemen, and each of the horsemen would equal about ten foot soldiers. So in order to gain victory on the battlefield the Muslims began to seek Allah's assistance and Allah answered them on the right amongst us assist him.

But Allah does not abandon His servants. He did not abandon His Messenger peace and blessings be upon him, who knew that this was a decisive war and so he sought Allah's help and Allah revealed the words

harmful is also from the physical means that Allah has made a cause for steadfastness: Muslims are reflecting this substance in the blood and physically striking the land upon which the fighters on the path of Allah marched with the Messenger of Allah, peace and blessings be upon him. We can know what happened when the two groups met: the reinforcement of combat between both groups - the army of the Muslims with the angels and those of the disbelievers - the Muslims appeared to increase in number in the sight of the disbelievers so much so that they appeared twice their number after they had seen them similar in number.

Allah, Most High, says:

وَمَا كَانَ لَكُمْ مِرَّةٌ فِي بَيْتِ الْقَتْلِ وَفِي تَغْيِيلِ رَبِّ سَبِيحٍ ثُمَّ وَأَخْرَى حَتَّى جَاءَهُمُ
بِصَافِرٍ رَاكِبٍ الْمَرَّةِ دُونَ بَيْتِ بَيْتٍ مِنْ بَيْنِكُمْ وَبَيْنَهُمْ لَأَذَلَّ الْأَعْيُنُ

"There has already been a sign for you (O Jews) in the two armies that met in combat at the Battle of Badr. One was fighting in the Cause of Allah, and, as for the other, they were disbelievers. They (the Believers) saw them. The disbelievers with their own eyes twice their number (although they were thrice their number). And Allah supports with His victory whom He pleases. Verily in this is a lesson for those who understand." (Soorah Aal Imran 1:173)

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The Mysteries of the Clouds

Allah, the Most High, says:

فَإِذَا زُلْزِلَتِ الْأَرْضُ زِلْزَالَهَا فَاتَّخَذَتْ مِنْ دُونِهَا حِجَابًا
فَرَأَى الْأَرْضَ كَاسِيَةً سَائِبًا مِنْ دُونِهَا

"See you not that Allah drives the clouds gently, then joins them together, then makes them into a heap of layers, and you see the rain comes forth from between them. And He sends down from the sky hail (like) mountains." (Soorah An-Noor 24:43).

And He, the Mighty and Sublime, says: "And We have brought but poor capital." meaning -what is spent gradually-

A Study of the Formation of Cumulus Clouds

Cumulus clouds begin to form from dispersed clouds that are gradually pushed by the mild wind driving the clouds and then they join together. Cumulus clouds form when two clouds join together or when one quickly builds up and when this happens, the advection,

(thermals) that spontaneously arise in the middle rise to the top. Once a thermal emerges as a cloud turret at the summit or the flanks of the cloud, rapid evaporation of the droplets at the cloud borders destroys the coherency and produces sinking. This is the joining together mentioned in the Qur'an:

﴿فَإِذَا جَاءَ السَّحَابُ فَجَمَعَ﴾

"See you not that Allah drives the clouds gently, then joins them together..."

hereafter, it builds up from top to bottom layering the clouds one above the other - a heap of layers and as such, the verse reads - "then unites them into a heap of layers." and after a while (shorter than the time it took between the joining together and forming of layers) rain falls. The rain comes down from between the layers or as the ascending stops, it begins to weaken and as it weakens the rains follow and as such, He said: "and you see the rain comes forth from between them" glorious is Allah!

How many a time do people see the cloud...? Did they know its mystery? Each time men increase in knowledge, their faith increases and this Qur'an is more than the glorious and noble Highgate that it is true which falsehood cannot come to from before it or behind

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Rain comes down in due measure
and revives the dead land

Allah, may He be exalted, says in His Holy Book

﴿وَالَّذِي يُسْقِطُ الْمَاءَ فِي سَعْدٍ مَبْرُورَةٍ﴾

"And Who sends down water (rain) from the sky in due measure, then We revive a dead land therewith, and even so you will be brought forth (from the graves)" (Soorah Az-Zukhruf 43:11)

This Verse is very important from a meteorological point of view. Those who read this Verse fifty years ago could not have found anything extraordinary in it because meteorological scientists in the 17th century did not know what resulted when water in the form of vapor condenses due to a drop in temperature and turns back into liquid.



In other words, they described the process of clouds turning into rain in very small, superficial and incomplete terms, that was why science did not yet understand how complex this process is. Because it was not possible to ask these atheist scientists these questions, the questions listed below were not put to anyone:

1. How can clouds in the upper strata of the atmosphere, where temperatures are as low as -40°C , such as the clouds over Siberia, remain as clouds? How come they do not condense and freeze then fall to Earth in the form of solid blocks on the heads of those who make false claims?
2. Why does a drop of water reach a particular size? How does this drop fall down to Earth with some kind of balance? In other

words, what are the conditions for the formation of the drop that reaches the ground very gently without much disturbance to the ground?

3. How is the vapor in clouds formed? Where does the salt that is present in the clouds come from, if salt does not evaporate with water when temperatures reach that level?

Science has tried, during the last 20 years, to answer such questions as these and it has managed to answer most of them.

Now let us read the Verse once more and find the important points in it.

Allah, may He be Exalted, describes the descent of rain as a physical phenomenon that is very important, as important as bringing the dead back to life. Hence He says:

﴿وَالَّذِي يُسْقِطُ الْمِطْرَ ۖ فَيُغْرِقُ النَّارَ بِوَجْهِهِ الْمَخْمُورِ ۚ﴾

"And Who sends down water (rain) from the sky in due measure, then We revive a dead land therewith, and even so you will be brought forth (from the graves)" (Soorah Az-Zukhruf 43: 11)

When the Qur'an describes rain, it describes it as coming down in due measure properly calculated. "Water in due measure", i.e. according to some measures and estimations. This is the definition of mathematical formulae.

"Then We revive a dead land therewith" This phrase appears in the middle of the Verse, and it is not a simple

or ordinary phrase, because the Verse does not say that rain leads to the bringing forth of vegetation. Rather it says "even so you will be brought forth (from the graves)". We will discuss the meaning



of this verse below

So this Verse refers to secrets that have to do with scientific miracles to a large extent. Now let us sum up the miracle of rain from a scientific point of view.

The latest scientific research has explained many points that were previously unknown to us about water, clouds and rain. The outcome of this research has shed more light on the miracle in the Verse quoted above. We

may sum up the outcome of this research in the following points:

1. One American scientist, Vincent Schaefer, stated that water particles, if they are clean, completely pure and very small, do not freeze until the temperature reaches -40°C . In order for water to freeze at 0°C , its mass should be large and it should not be completely pure. Clouds are a form of water vapor that quickly turns into very small particles of water; in other words, a cloud has a very particular physical composition. This is the reason why the regular characteristics of water are not applicable to it. Hence, we see that the clouds in the atmosphere do not freeze and do not turn Earth as frozen water, even if the temperature drops to -30°C .



2. Clouds are formed from very small particles of water which are gathered around particles of salt or cosmic dust. The basic element of rain is these particles of salt or cosmic dust which form the nucleus of every small particle of water. No one knows until now where this cosmic dust comes from, just as no one knows how the salt particles end up in the clouds. But it is believed and thought that they are the result of evaporation that takes place near the ocean surface, as the salty water carries with it particles of salt when it evaporates.

It is thought that one cubic centimeter of cloud contains one billion small particles of water and that between 30 and 5,000 droplets of rain are formed in each cubic centimeter of the clouds, and that these droplets turn into rains drops according to precise measures or calculations. Up until 1950, the theory of [Bergruen? Berger? Find us?] about clouds was sufficient to explain the formation of water drops. This theory said that water droplets originally form a frozen center, and as a result of other droplets gathering around these frozen centers, rain occurs.

4. Recent scientific research indicates that the increase in size of water droplets in clouds has to do with many factors and conditions and that the size of any water droplets increases gradually and is dependent on many complicated and interconnected factors. These droplets are even able to overcome atmospheric conditions where temperatures fall to -40°C .

5. As to how rain is formed, it is as follows:

Small particles of water gather around the nucleus mentioned above and increase in size. As the drop of water starts to fall down, the area of its surface increases as it approaches the ground, which makes it more resistant with the air against it. The air then falls gently to the ground. This balance is another Divine miracle, because the drop of water gains speed as it passes during its fall, reaching an appropriate speed so that when it reaches the ground it falls as if it has a parachute.

In the light of the scientific facts, let us read the first part of the Verse on Sarah: *And Who sends down water (rain) from*

the sky in due measure"

So the rain of rain is something very precise which is subject to very complicated calculations

I will compare that with the third phrase of this Verse so as to recognize that the issue of rain is a Divine miracle akin to the miracle of giving life to the dead.

Modern science is exactly the science of meteorology regarding the formation of rain and its falling to be ground as a scientific miracle. Hence, many volumes have been written about it.

I advise any readers who want further information on this topic to refer to the following scientific books.

Elements of Cloud Physics, by Horace Robert Byers

Cloud Physics and Cloud Seeding, by Louis J. Battan

Now let us return to the meaning of the second phrase of the Verse "Then I will cause a cloud, and the earth will be dark, and I will bring rain down (from the graves)"

There is a secret, dead land beneath the soil when the soil is dry. That is because the soil is in fact alive and this vitality emerges when rain falls. What does science say about this matter?

There are huge numbers of bacteria in the soil, as many as one million in one cc of soil. When rain is withheld for a long time, these bacteria lose their vitality and it is transformed into what may be described as a dead genetic code. When rain falls, these bacteria regain their vitality and begin their production campaign and the first thing they produce is nitrogen. This activity leads to giving life to thousands of small living beings. Thus life begins to be restored beneath the soil as the fertilizer nitrogen is formed and many small seeds which we would never miss nor notice begin to sprout and seedlings to sprout down making tunnels beneath the soil which act like roads and trails. Then small insects and plants begin to build their homes there and it becomes like a city that is formed beneath the soil. Thus a dead city is transformed into a living city full of life and movement.

What is the secret behind the rain's giving life? How can rain revive biological functions and bring back life?

In this context, the Verse directs our attention to the connection of rain and hence, water, with life and calls upon us to understand this connection. I will discuss here about material living beings only. These beings are composed of particles among which are some particular particles which help life to continue and preserve it. These are the hydrogen atoms [H] particles which are known as the hydrogen bond, or hydrogen connection. These hydrogen particles have an extraordinary power to convert some to create new particles. This has transfer and perpetuate life. These hydrogen particles can only interact with other hydrogen particles that appear when water is ionized and turned into oxygen and hydrogen particles.

I will also apply this living beings with an exception. I am saying, being left without water it preserves its DNA particles and genetic code, but these particles and codes occur in an isolated and solid form, and cannot grow or move. But if there are green water which releases hydrogen particles when it is ionized, the living genetic code begins to move.

It may be noted that this law applies to germs in particular in a very simple manner. As for the large living beings that are complex in organization, if water for a long time ceases their tissues to atrophy and diminish. Hence, if water becomes available after that, life can never be restored to those beings and they remain dead.

Thus restoring life to the dead land is based on this precise biological law. If we had understood what we read in the Holy Quran, especially in recent times, we would have been others to discovering these scientific truths.

Now let us read the second part of this Verse: "And even so you will be brought forth (from the graves)"

Now the verse is addressing the man and saying to him: Your being brought back from the dead and being revived once more is no more than a reactivation of your genetic code that is found in the soil, and that will be done by Divine command.

Just as water gives vitality to genetic codes that are found in the soil and life is suddenly born in the soil as soon as the Divine command is issued to restore life, these codes will begin to move

quickly, like a computer system, and life will come back once more

Allah, the Everlasting, gives rain to the earth, and it gives forth what is in it. He sends a shower down, just as Allah sends hydrogen ions to the soil and brings it back to life. He is able to restore life to you too.

The number of people who have ever lived on this earth of Adam's people be upon him, until now is approximately 80 billion.

- The size of the genetic code of each person is approximately one million.
- If the genetic codes of all these people – which means the genetic codes of ten billion people – were gathered together, they would only fill a single cup. If Allah, the Almighty, were to scatter this cup filled with genetic codes on the soil and say "Come to life," all those people would come back to life in less than one second.

Thus Allah addresses people of wisdom and reason with such likenesses and says:

"And who sends down water (rain) from the sky in due measure, then We revive a dead land therewith, and even so you will be brought forth (from the graves)." (Soorah Al-Zukhruf 43:11).

Allah, Most High, the Almighty, speaks the truth.

Orkhan Muhammad Ali, Istanbul.



The Lowest Point in the World

The Wonder verses

Allah, Most High, says:

بَلَاغٌ مِّنْ عِندِ رَبِّكَ إِلَى الَّذِينَ لَا آمِنُوا وَهُمْ يُبْغِضُونَ
لَكَ صِغَارَ الَّذِينَ آمَنُوا قُلْ رَبِّهِمْ يَوْمَئِذٍ
بَصِيرٌ فَمَنْ حَمَلُ مِنْ سَكَاةٍ وَفَوَاقِهَا الرِّجْدُ ۝

"Aid-Lam-Mim. The Romans have been defeated. In the nearest land (Syria, Iraq, Jordan and Palestine), and they, after their defeat, will be victorious. Within three to nine years. The decision of the matter before and after these events, is only with Allah. (before the defeat of the Romans by the Persians, and after the defeat of the Persians by the Romans) And on that Day the Believers, i.e. Muslims, will rejoice, (at the victory given by Allah to the Romans against the Persians) with the help of Allah. He helps whom He wills, and He is the Almighty, the Most Merciful" (Soorah Ar-Room 30:1-5).

Linguistic Interpretation

Imam Mundhir said in *Lisan Al-Arab*: the word *Adna* (translated in the Verse as "in the nearest land") means "to draw near" or "something's nearness and proximity to draw near. There is a narration in another form: rec'd from Abu Kalbi - for it was mentioned by Abu Al-Hasan and Abu Sa'eed in their books - "Adna" Adna means "lowest".

The Understanding of the Scholars of Tafseer

The scholars of Tafseer such as Abu Bakr, Abu Ja'far, Abu Ja'far and Ibn Kathir referred to the first meaning of the word *Adna* in verses. They mentioned that *Adna* - *Ad* means the closest one. It has been narrated from Ibn Abbas and As-Suddi that the war between Rome and Persia occurred between Jordan and Palestine. Imam Abu Ja'far As-Saqafi defined the place of the battle as being between Adhriat in Jordan and Basra in Sham (Syria).

Scientific Facts

Geographical maps show the lowest points on the Earth's surface and the lowest point on the Earth's surface is the one adjacent to the Dead Sea in Palestine. It is three hundred and ninety-two meters below sea level. This has been confirmed by aerial images and measurements.

Scientific Interpretation

Allah, Most High, says in His Noble Book

- ﴿لَا إِلٰهَ إِلَّا هُوَ ۚ الْعَزِيزُ الرَّحِيمُ ۝ لَا إِلٰهَ إِلَّا هُوَ ۚ الْعَزِيزُ الرَّحِيمُ ۝﴾
 ﴿وَمَنْ يَرْجُ الْآخِرَ مِنْ قَبْلِ يَوْمٍ تَقْدِرُ وَتُقَدَّرُ ۖ فَسَوَّغْتُ لِلْمُؤْمِنِينَ ۝﴾
 ﴿يَوْمَ يَكْفُرُ الْأَكْثَرُ بِمَا كَانُوا يَفْعَلُونَ﴾

*Alif-Lam-Mim, The Romans have been defeated. In the nearest land (Syria, Iraq, Jordan and Palestine), and they, after their defeat, will be victorious. Within three to nine years. The decision of the matter before and after these events is only with Allah (before the defeat of the Romans by the Persians, and after the defeat of the Persians by the Romans). And on that Day, the believers (i.e. Muslims) will

rejoice at the victory given by Allah to the Romans against the Persians with the help of Allah. He helps whom He wills and He is the Almighty, the Most Merciful. (Saarah Al-Room 30:1-5).

The cause of revelation of these Verses was the battle which occurred between the Persian and Roman empires at a place between Adhriat and Basra, close to the Dead sea. The Persians were victorious therein. This was in the Year 619 C.E.



This is the lowest point on the Earth's surface, which is the lowest point of the Earth's surface.

Muslims were grieved at the defeat of the Romans because they (Romans) were the people who practiced a heavenly revealed religion and to whom a book was revealed, while the Persians were Magians, the worshippers of fire. Thus, Allah promised the Muslims that the Persians would be defeated in a second battle within three to nine years and that the victory of the Romans would come with the victory of the Muslims over the polytheists (of Makkah).

What the Noble Qur'an promised came to pass after seven years (i.e. within the timeframe which the Qur'an had stated earlier. The second battle between Persia and Rome occurred in 626 C.E. and the Romans were victorious therein and this came with the victory of the Muslims over the polytheists in the Battle of Badr.

revealed these Verses to console the believers and to dampen the joy of the unbelievers. A late, Most High, - says

"Alif-Lam-Mim. The Romans have been defeated in the nearest land (Syria, Iraq, Jordan and Palestine), and they, after their defeat, will be victorious. Within three to nine years..." (Soorah Ar-Room 30:1-4)

That is, in less than ten years. After this information, Allah says:

صبر به بصیرت منجبت است و هو حکمت و البرهان و بعد از آنکه لا یجوز ان یعد و یسکی

"The decision of the matter, before and after (these events) is only with Allah, (before the defeat of the Romans by the Persians, and after the defeat of the Persians by the Romans). And on that Day, the Believers (i.e. Muslims) will rejoice (at the victory given by Allah to the Romans against the Persians) with the Help of Allah. He helps whom He wills and He is the Almighty, the Most Merciful. It is a Promise of Allah and Allah fails not in His Promise but most of men know not. They know only the outside appearance of this world (i.e. the matters of their livelihood, like irrigating or sowing or reaping, etc.) and they are heedless of the hereafter." (Soorah Ar-Rum 3/4-7).

When these Vornes were revealed,

*And on that Day, the Believers (i.e. Muslims,) will rejoice at the victory given by Allah to the Romans against the Persians), with the help of Allah. *

They were followed by

“(It is) a Promise of Allah (i.e. Allah will give victory to the Romans against the Persians), and Allah fails not in His Promise.”

«**وَاللَّهُ يَسْتَوِي**»

'And say Praise is to Allah, you shall soon be shown His Ayat (Signs, Verses, etc.) and you shall know them..'

Light & Reference

The *Encyclopaedia Britannica* states about the Dead Sea: A stranded salt-water body, between Israel and Jordan. It is the lowest water body on earth. Its surface altitude is one thousand three hundred and twelve feet (319) roughly four hundred meters (409) below sea level. Its northern end is divided between Jordan and Israel. It was an inlet of the Arabo-Persian Gulf in 1900. The Israel occupies 10% of western bank of the sea. The Dead Sea is located between the Golan Heights to the west and the Judean mountains to the east.

Maculosis Point

The **mean** **depth** **point** **in** **the** **statement** **is** **that** **A** **is** **Highly** **Asian** **but** **has** **only** **been** **in** **in** **word** **in** **a** **And** **a** **long** **ago** **means** **both** **new** **and** **lowest** **The** **lowest** **point** **is** **the** **Dead** **Sea** **in** **Palestine** **exactly** **as** **recorded** **by** **satellites** **after** **fourteen** **centuries**

She kept her Zuhayra's name in his regard. His house was the place of some poor priests accepting a share. The priests rejoiced because they were also worshippers of the deity of their fellow idolaters even the people of the flock in the back but some were also some while the Christians and the Muslims were grieved. Thus Allah

Meaning the Romans that were defeated shall become victorious within a period of less than ten years:

﴿وَيَوْمَئِذٍ يُفْتَحُ لِلْمُؤْمِنِينَ﴾

"And on that Day, the Believers (i.e. Muslims) will rejoice"

The second aspect of this victory was that the believers were to win therein. After this:

﴿وَقَدْ نَزَّلَ اللَّهُ مُبَارَكًا وَعِدًا﴾

"It is a Promise of Allah and Allah fails not in His Promise."

i.e. about what will be:

﴿وَلَكِنَّ أَكْثَرَ النَّاسِ لَا يَعْلَمُونَ﴾

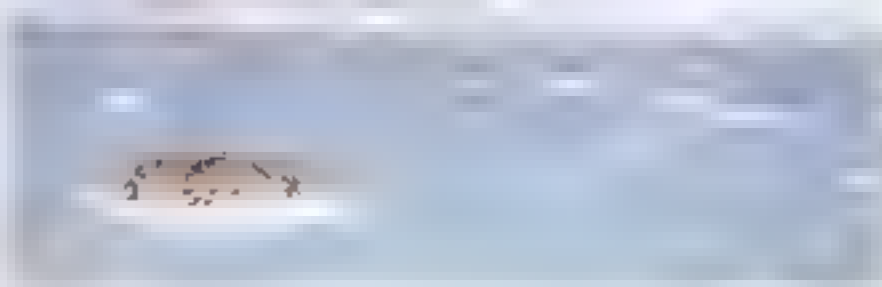
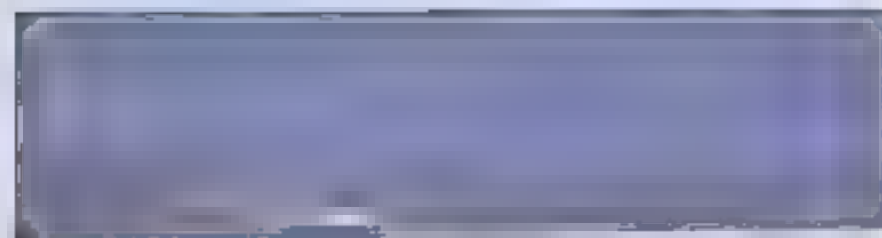
"but most of men know not."

These statements aroused feelings of exultant pride, arrogance and domination in the polytheists. Thus, one of the unbelievers has narrated the Verses came to Abu Bakr may Allah be pleased with him, and said: "Do you see what Muhammad says?" Abu Bakr asked: "What did he say?" He said: "He says the Romans shall defeat the Persians." Abu Bakr said: "He speaks the truth – yet more than seven years had passed before the promise of Allah, the Glorious and Most High, came to pass with the victory of the Romans over the Persians and the Believers rejoiced. This was in the year of the Treaty of Hudaibiyyah.

﴿وَقَدْ نَزَّلَ اللَّهُ مُبَارَكًا وَعِدًا﴾

"Auf Lam-Mim. The Romans have been defeated in the nearest land (Syria, Iraq, Jordan and Palestine) and they, after their defeat will be victorious. Within three to nine years..." (Soorah Ar-Room 30:1-4).

This was a miracle for the earliest generation of Muslims; a hidden matter which they came to witness after seven years of the revelation of the Qur'an. As a result, some of the unbelievers accepted Islam and said: "Muhammad is an intelligent person, not one deranged; he



prophetic of his religion, his nation and the effects of Islam on the course of a conquered state." "In a short period of time which would be within his own lifetime for it. If ten years had passed and Rome had not defeated Persia then Islam, be it for an and Muhammad would have faded away (with no one believing them). However, Muhammad made the pledge with all that he had. He lived for a time and was categorical about it. Then after two seven years had gone, what he said had come to pass. It is not possible from this prophecy to have been from a man. This must be the work of the one who governs man." And so they (the unbelievers) accepted Islam."

Az-Zaidi said: "I met with one of the leading geologists in America, Professor Palmer. He came to me and brought with him a globe of the Earth showing details of the elevations and depressions upon the Earth, the deepest he saw. And the altitudes and depths were clearly shown on contours in meters. When he took his seat I said:

"We have a statement in the Qur'an that says that the plain near Bait al-Maqdis (where the battle took place) is the nearest point on the world. The statement is: 'Adh-dharra' is the nearest (or lowest) land.' The word Adh-dharra is denied to could imply nearest for example if I said: Adh-

Another Verse reads:

﴿ثُمَّ نَسْفُتْ إِلَى الْأَرْضِ دُخَانًا﴾

"Then He Istawa (rose over) toward the heavens when it was smoke." (Soorah Fussilat 41:11)

The Earth preceded the development of heaven.

"Then He Istawa (rose over) toward the heavens when it was smoke" i.e. there are layers in the heavens which were smoke. This is the statement of Allah, and this is what science corroborates. If you need evidence, then go to any observatory and look at the heavens, you will find smoke in the heavens, a remnant of the smoke from which stars and planets have formed till date. Were we to ask a Bedouin or a civilized person "Does not smoke emanate from fire or fire from smoke?"

he would say:

"Smoke definitely emanates from fire"

I ask:

"Yes, but imagine that stars and planets were once smoke? and this fire was once smoke? this would occur to anyone but it is exactly what the Qur'an affirms. Allah, Most High, says:

﴿ثُمَّ نَسْفُتْ إِلَى الْأَرْضِ دُخَانًا وَنَحْنُ أَقْبَرُ﴾

"Then He Istawa (rose over) toward the heavens when it was smoke and said to it and to the Earth: come forth of you, willingly or unwillingly. They both said: We come, willingly." (Soorah Fussilat 41:11).

Scientists study the Earth and say: "The mountains were formed by a process of expulsion from within the Earth in the form of volcanoes."

﴿وَإِذَا الْأَرْضُ مُدَّتْ وَأَلْقَتْ مَا فِيهَا وَتَخَلَّتْ﴾

"And when the Earth is stretched forth, and has cast out all that was in it and becomes empty." (Soorah Inshaaq: 84:3-4).



It casts out all that was in it — this is in the end — but at its beginning mountains are mentioned as pegs mentioned in the Qur'an:

﴿وَالْجِبَالُ أَوْدَانُ﴾

"And the mountains He has fixed firmly." (Soorah An-Naziat 79:32)

The mountains were cast upon the Earth, thereafter water came forth from within the Earth.

All seas and rivers were once inside the interior of the Earth and came out from the interior to the surface. Listen to the statement of the Protector, Glorious is He and Most High:

﴿وَالْأَرْضُ بَدَا تَحْتَهَا﴾

"And after that He spread the Earth." (Soorah An-Naziat 79:30).

About the beginning of creation, He says:

﴿ثُمَّ نَسْفُتْ إِلَى الْأَرْضِ دُخَانًا وَنَحْنُ أَقْبَرُ﴾

﴿ثُمَّ نَسْفُتْ إِلَى الْأَرْضِ دُخَانًا وَنَحْنُ أَقْبَرُ﴾

"Are you more difficult to create, or are the heavens that He constructed? He raised its height, and He has equally ordered it, its night He covers with darkness, and its forenoon He brings out (with light). And after that He spread the Earth; And brought forth therefrom its water, and its pasture, and the mountains He has fixed firmly." (Soorah An-Naziyat 79:27-32).

Does not this statement read the same as what we have already seen earlier:

﴿لَمَّا رَمَعْنَا سُبْحًا وَوَرَعًا ۖ فَنفَخْنَا كِبًا ۖ فَنفَخْنَا كِبًا ۖ فَنفَخْنَا كِبًا ۖ﴾

"And brought forth therefrom its water and its pasture; and the mountains He has fixed firmly. To be a provision and benefit for you and your cattle." (Soorah An-Naziyat 79:31-33)

But do you know what succeeds this Verse?

﴿يَوْمَ يَكُونُ النَّاسُ كَالْفَرَاشِ الْمَبْثُورِ ۖ وَتَكُونُ الْوُجُوهُ كَالْعُشْبِ الْمُتْنَبِتِ ۖ﴾

"But when there comes the greatest catastrophe (i.e. the Day of Recompense etc.) the day when man shall remember what he strove for. And Hellfire shall be made apparent in full view for every one who sees." (Soorah An-Naziyat 79:34-36).

Contemplate this verse which has been written as 1400 years or fourteen hundred years (1400 years) while they (scientists) are now saying "We have studied the earth and its history and found that it has been created in this manner just as the Qur'an describes" — the first part discusses about the beginning of the creation and second part about the end of it. As we have witnessed the beginning, so be it we shall witness its end to be true.

﴿يَوْمَ يَكُونُ النَّاسُ كَالْفَرَاشِ الْمَبْثُورِ ۖ وَتَكُونُ الْوُجُوهُ كَالْعُشْبِ الْمُتْنَبِتِ ۖ﴾

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who sees." (Soorah An-Naziyat 79:34-36).

﴿يَوْمَ يَكُونُ النَّاسُ كَالْفَرَاشِ الْمَبْثُورِ ۖ وَتَكُونُ الْوُجُوهُ كَالْعُشْبِ الْمُتْنَبِتِ ۖ﴾

﴿يَوْمَ يَكُونُ النَّاسُ كَالْفَرَاشِ الْمَبْثُورِ ۖ وَتَكُونُ الْوُجُوهُ كَالْعُشْبِ الْمُتْنَبِتِ ۖ﴾

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"The day when man shall remember what he strove for. Hellfire shall be made apparent in full view for (every) one who sees. Then, for him who Tagha (transgressed all bounds, in disbelief, oppression and evil deeds of disobedience to Allah). And preferred the life of this world (by following his evil desires and lust, verily, his abode will be Hellfire. But as for him who feared standing before his Lord, and restrained himself from impure evil desire, and lust; verily, paradise will be his abode." (Soorah An-Naziyat 79:35-41).

Choose that which you prefer. This is the statement of the Lord of all realms. Scientists studied the interior of the earth and what did they find? They found its interior in a state of motion, from which currents of heat emanate. Imagine that the Earth is cut in two halves: we are upon the uppermost layer — the crust of the Earth — and the remaining



only in the creation of the heavens and the Earth, and in the alternations of night and day, there are indeed signs for men of understanding. Those who remember Allah a ways, and in prayer, standing, sitting, and lying down on their sides and think deeply about the creation of the heavens and the Earth, (saying) 'Our Lord! You have not created all this without purpose. Glory to You! Exalted be You above all that they associate with You as partners.' Give us salvation from the torment of the fire. Adh-Dharr 7:100-9

If these signs is the gravitational attraction which Allah has put between stars and planets. Allah, Most High, says:

﴿لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ لَا تَأْخُذُهُ سِنَةٌ وَلَا نَوْمٌ لَّهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْفَ أَيْدِيهِمْ وَلَا يُحِيطُ بِشَيْءٍ إِلَّا بِمَا شَاءَ وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ وَالْأَرْضَ وَلَا يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ﴾

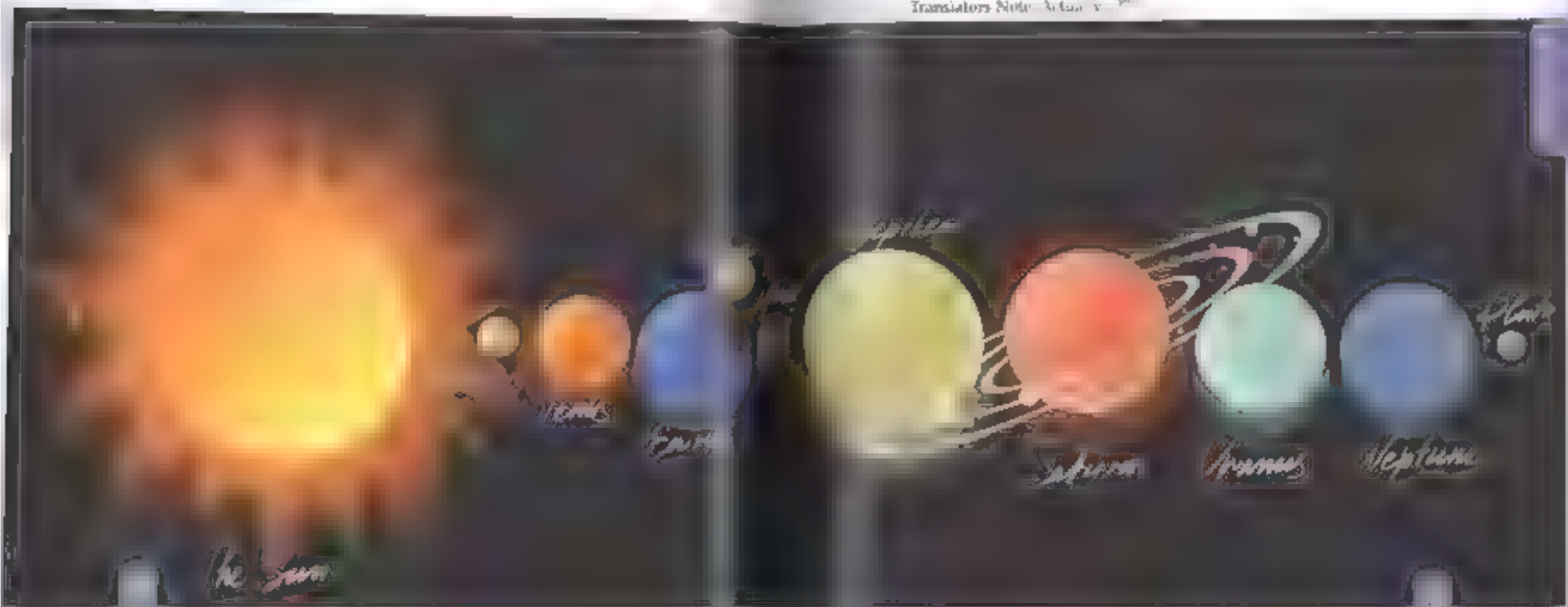
*Allah It is Who has raised the heavens without pillars that you see
Soorah Ar-Rad 13:2

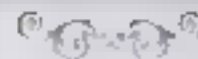
And by the number of calculations of the phases of the moon, the sun, the stars, and sundown, those in heavens were signs which we cannot see. That pillar is the force of gravity which keeps the earth in its orbit around the sun.

The sun for example attracts the earth toward itself with tremendous force making the earth follow a curved path around the sun. If gravitational force were to vanish, the earth would leave its path around the sun and would be flung into the abyss of space in pitch darkness and freezing cold. If it were to fall at all, it would cease as its temperature would decrease to minus two hundred and seventy degrees (-273°C). This is the temperature of absolute zero, the point at which motion ceases to exist.

Allah, Most High, says:

Translators Note: Ar-Rad 13:2





This is from the Signs on the horizon, What of the Signs in the self?
The Most High, says:

﴿وَلَا تُدْرِكُهُ الْبَصَرُ﴾

"And also in yourselves..." (Soorah Adh-Dhoariyat 51:21)

A man is relaxing in a garden and he suddenly observes something large, dust-brown, and close to al-hamam coming toward him. What effort does this have on his body? The image of this threat is immediately cast on the image of his eye. This information is transmitted to the brain. The brain gauges the gravity of the threat and commands the pituitary gland, which contains the hormone adrenaline to respond to his threat. This hormone prepares the heart to beat faster (a frightened person's heart beats faster) and enables the lungs to breathe rapidly in consonance to the faster heart beat (a frightened person's lungs work faster and thus he gasps). The hormone has a third effect on the blood vessels, constricting them and diverting blood to the muscles (a frightened person red-ens). It has a fourth effect on the liver increasing the amount of sugar injected into the blood. Sugar of course is the fuel for the muscles. The hormone has a fifth effect on the liver to increase the blood clotting hormone in order to prevent hemorrhage. All these actions occur within a few seconds!

﴿مَنْ خَلَقَ كَمَا يُشْرِكُونَ﴾

"This is the creation of Allah. So show me that which those (whom you worship), besides Him have created." (Soorah Luqman 31:11).

Prophet Muhammad, peace and blessings be upon him, said in a narrative reported by Al-Bukhari and Muslim: "The similitude of the one who remembers his Lord, and the one who does not remember his Lord, is the similitude of the living and the dead"

Qutubul Awwal II - Islam By Muhammad



﴿إِنَّ اللَّهَ يُمْسِكُ السَّمَوَاتِ وَالْأَرْضَ أَنْ تَزُولَا﴾

Verily Allah grasps the heavens and the Earth lest they move away from their places..." (Soorah Fatir 35:41).

So the way we appreciate the strength of the gravity that holds all of the sun in the Earth, let us assume that this same vanishes for one region or the other and in one or the Earth is a main oil field with the sun coming up in its path. We would have to be able to tie the sun with visible pillars of steel. Steel is one of the strongest metals and one of the best to withstand up stress. A wire made of steel with a diameter of one millimeter can support the weight of a hundred kilograms. Thus we would require ten million steel ropes, each rope being one hundred and fifty centimeters in diameter (500 ft. long and 1.5 inch in diameter) and if we had another set of these steel ropes we could support more than two million tons (2,000,000 tons) of weight. Thus, what could we imagine the sun's gravity to be pulling on the Earth? It is a million tons multiplied by ten to the 27th power. When we now plant these ropes on the Earth's surface facing the sun, we would be surprised to find ourselves in a mess. If steel ropes in such a way, the space between adjacent ropes is less than the diameter of a third rope. Thus most of the ropes would screen the sun's rays from us completely and prevent us from an action or a reaction. All its tremendous force just to let the Earth to move in its path around the sun three centimeters every second! Allah, Most High, rightly says:

﴿إِنَّ اللَّهَ يَرْزُقُ السَّمَوَاتِ وَالْأَرْضَ بِغَيْرِ عِلْفٍ﴾

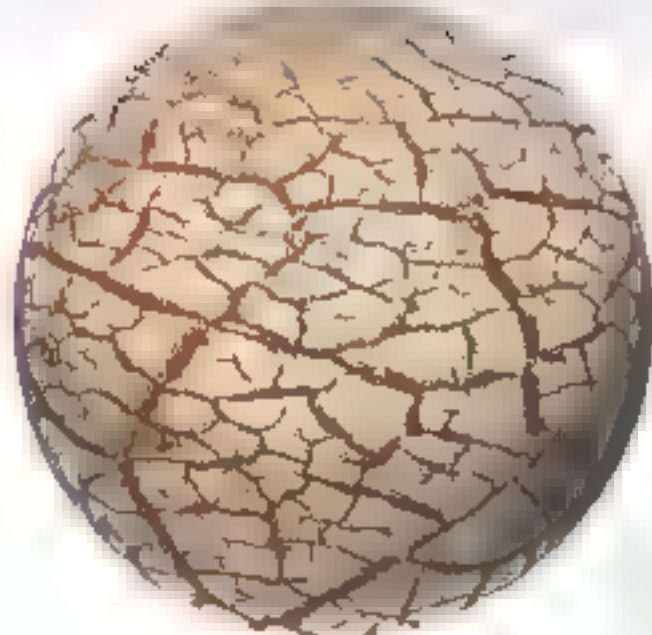
"Allah it is Who has raised the heavens without pillars that you see (Soorah Ar-Ra'd 13:2).

He also says:

﴿إِنَّ اللَّهَ يُمْسِكُ السَّمَوَاتِ وَالْأَرْضَ أَنْ تَزُولَا﴾

Verily Allah grasps the heavens and the Earth lest they move away from their places..." (Soorah Fatir 35:41).





The Earth's Shrinkage

Allah, Most High, says

﴿أَوَلَمْ يَرَوْا أَنَّا نُنْخِصُهَا بِرُءُوسٍ وَأَنَّا زَجَّجْنَا سُكُوتَهَا بِغَمَامٍ﴾

See (they not that we gradually reduce the land and Allah judges, there is none to put back His judgment and He is swift at reckoning.) (Soorah Al-Ra'd 13-41)

The earth's surface is not flat; there are high peaks, low valleys and level ground. From another perspective, the earth resembles a ball having two poles and an equator. The earlier scholars of *Tafsir* said that

the reduction of the Earth from its borders has one of two meanings. It either means the death of scholars as this leads to serious corruption of life or it means the removal of the lands of the disbelievers through conquest by the Islamic state. Earth

However, modern science marks a brilliant fact that the Earth is in constant shrinkage. It re-absorbs itself from all its borders and poles. The cause of the shrinkage is the expulsion of tremendous amounts of waters and energy in the form of gases, vapor, clouds and other matter. These are expelled via the vents or volcanoes in millions of tons continuously, leading to the shrinkage of the Earth. Scientists assert that the original Earth was at least two hundred times its present size. And Allah, Most High, knows best.

Min Aayati il-'Ijaz fi-Qur'an by Dr. Zaghniul An-Nagar. See also *Al-Hattu Al-Balarr*. For the scientists say, the Earth's tides (rising and ebbing) are one of the causes of reduction in land surface. You will find that in the study we have referred to previously.





The Wondrous Mineral Accumulation

Allah, the Exalted, says:

﴿سُبْحَانَ الَّذِي عَلَىٰ ثَرْوِهِمْ خَزَائِنُ السَّمَوَاتِ وَالثَّرَافِ﴾

Glory be to Him Who has created all the pairs of that which the Earth produces as well as of their own human-kind (male and female) and of that which they know not. " (Soorah Ya Seen 36:36).

The Messenger of Allah, peace and blessings be upon him, said:

"Allah created Adam from a handful which He took from the whole Earth. Thus the progeny of Adam come from all of the Earth: amongst them are red (skinned), white and black, and all shades in between. Amongst them are the gentle, the fierce, the evil and the good." (Saheeh) - Reported by Abu Dawood, Al-Tirmidhi and Ahmed.

Studies have shown that the human body is made up of the constituents of the Earth which are: water, sugars (carbohydrates), proteins, fat, vitamins, hormones, chlorine, sulfur, phosphorus, magnesium, calcium, potassium, sodium, iron, lead, iodine and other elements. These elements combine with each other to form bones, muscles, lens of the eyes, the hair of the head, the teeth, blood, glands, saliva and other things in your body. These elements (or materials), combine with each other in fixed and delicate proportions in the human body. These proportions are known only to the Lord of the entirety of creation. Experimental analyses have shown that if all the material that goes into making up the human body is gathered and combined, we would have the following materials: a box of chalk, a box of matches, some small nails, a handful of salt and some other

substances which are of (little or) no value. All of these not worth more than ten pound sterling. Is it then reasonable to say that man is not worth more than this amount? (If so) then your clothing or your wrist watch would be worth more than your entire self. would it not? What

FOOD

is the real value of man? The value of the substances (several as they are) which make up man is near worthless. Therefore the value of a thing must be estimated only after its formation and understanding of its benefit. Comparing man with machines (or instruments) is therefore an extreme folly. An object should never be compared except with its similitude. Otherwise, sheep and camels would be deemed more important (more valuable) than man. Therefore we state that Man has a lofty position which is beyond our material estimation or measurement. The evidence for this is the statement of Allah, Glorified and Exalted is He

﴿وَعَدْنَا مَن فِي ذُرِّيَّتِهِ نَارًا وَالْعَالَمَ دَرَجَاتٍ مِّنْ

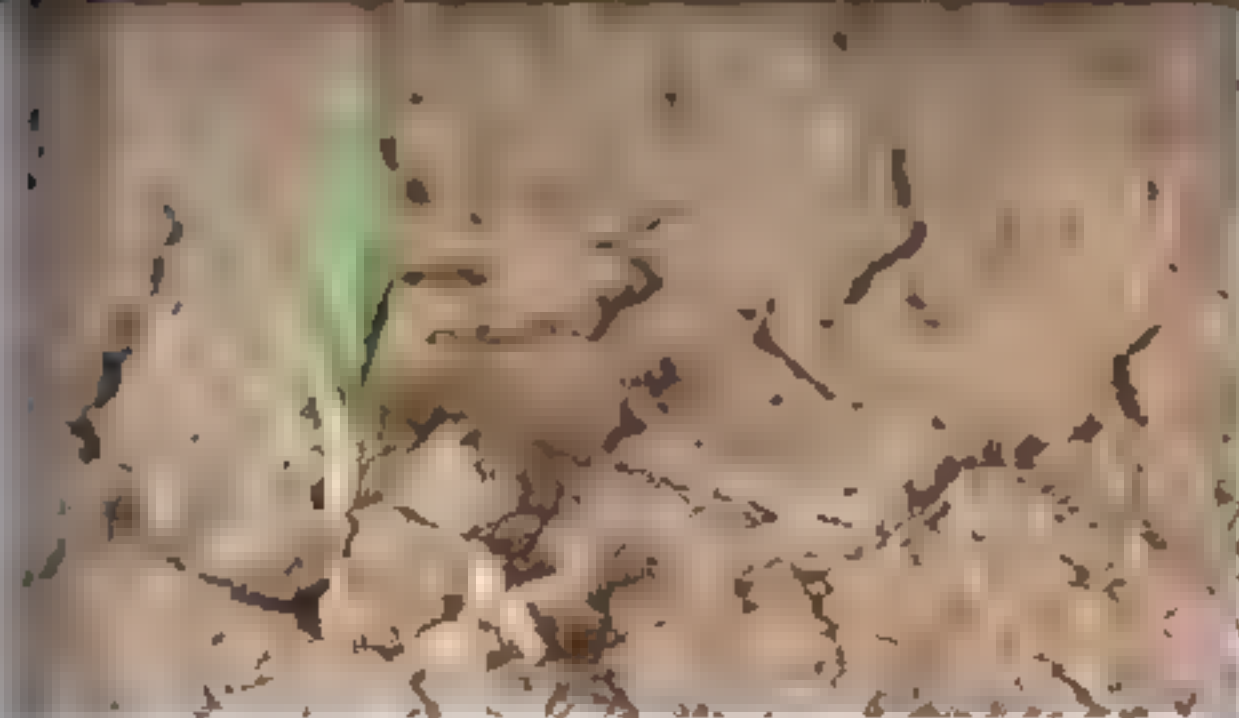
عِلْمٍ وَفَصَّلْنَا بَيْنَهُمُ الْعِلْمَ فَمِنْ أَصْحَابِ

*And indeed We have honored the children of Adam, and We have carried them on land and sea, and have provided them with Al Tayyibat (lawful good things), and have preferred them above many of those whom We have created with a marked preference. (Soorah Al-Isra 17-20)

He, Most High, also says in Soorah Al-A'raf

﴿وَلَقَدْ خَلَقْنَاكَ مِن نَّارٍ مِنَّا وَلَقَدْ عَودْنَا لَكُمُ الْعَذَابَ وَلَئِن كُنَّا لَصَّادِقِينَ ﴿١٢١﴾﴾

And surely We created you (your father Adam) and then gave you shape (the noble shape of human being) then We told the angels, prostrate before Adam, and they prostrated, except 'blees Satan, he refused to be of those who prostrated. Allah said: 'What prevented you (O 'blees, that you did not prostrate when commanded you?' 'blees said: I am better than him (Adam), You created me from fire and him You created from clay' (Soorah Al-A'raf 7:11-12).

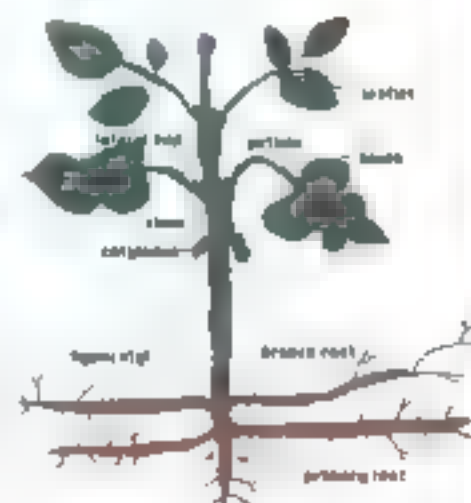


Allah's Signs in the Plants

Allah, Most High, says in His Book

﴿وَهُوَ الَّذِي أَنزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجَ بِهِ نَجَاتٍ مِّنْ تَحْتِهَا نَاقُورًا مَّخْرُوجًا وَمِنْ تَحْتِهَا يَبُوتُ حَبًّا شَعِيرًا وَمِنْ ثَمَرَاتِهَا تُنْقَلِبُ إِلَىٰ ذَاتِهَا وَمِنْهَا يُخْرَجُ لُبًّا وَنَبَاتٌ مِّثْلُ النُّجْدِ وَقَدْ جِئْنَاكُمْ بِهِ قُرْآنًا مَّرْجُومًا ﴿١٦٥﴾﴾

It is He Who sent down water (rain) from the sky, and with it We bring forth vegetation of all kinds, and out of it We bring forth green stalks, from which We bring forth thick clustered grain. And out of the date-palm and its spathe come forth clusters of dates hanging low and



near, and gardens of grapes, olives and pomegranates, each similar (in kind) yet different (in variety and taste). Look at their fruits when they begin to bear, and the ripeness thereof. Verily in these things there are signs for people who believe." (Sourah An'am 6:99)

1. Plants are a kingdom on their own, and scientists cannot make giant strides in unveiling its characteristics.



Scientists have classified plants according to their physical structures or reproductive characteristics or based upon their habitats.

2. Plants generally germinate from seeds when the conditions are right for germination. The most important of these conditions is that of its germ. The seed preserves the vitality of its germ for long periods of time, which in itself is evidence for the existence of Allah. It has been possible to germinate seeds of wheat found in the graves of pharaohs.

It is necessary to have a certain amount of water, and the right temperature (for seeds to germinate). Each seed germinates at a specific temperature. It is also necessary to have air (for germination), this is a necessity for any living organism which breathes, senses, grieves or rejoices. Experiments have been conducted on plants placed in space raft using measuring instruments that show that the plants

experience a nervous breakdown that results in disorderly growth, but upon returning to the Earth, the plants returned to normalcy and fringed.

When a seed germinates and the germ emerges to form tiny roots, it begins to feed on the stored food in the seed until its root lettings and penetrates into the Earth in order to feed therefrom. Its condition is like the fetus in man and animals. It feeds from its mother whilst in her womb, then it feeds from her milk. Eventually it becomes independent of her and depends upon itself for sustenance when its body is well-developed. Where are we besides Allah who has paired it in the seed? Is there anyone other than Allah who has given the roots the ability to penetrate the Earth and brought forth the stem (trunk) spreading upon it leaves, such that it flowers and bears fruits? Undoubtedly, this is the work of a complex sublime intelligent reasonable being whose aim is preservation of the different species and the continuation of life. So, Glorified is the Ever-Living (Allah), the Bestower of life.



The feeding organs of plants. The Root

Roots are the first feeding organs of plants and are of different types, depending on the needs of the plant. There are tap roots, nodal roots, some are fibrous, and others are aerial roots and breathing roots. They are adapted to enable the plants to obtain their nutritional needs. Plants without roots are provided with suction organs for feeding.

◆ Darwin said "If plants were at poses outside, then it would necessarily be in their roots within the earth, because — moves in the earth's

﴿قَالَ رَبُّكَ لَا تُعْبِدُ الشَّمْسَ وَلَا الْقَمَرَ﴾

interior encountering barriers and rocks; if it is unable to avoid them, it shoves them out of its path otherwise it excretes acids upon them to dissolve them.

◆ Roots have another general importance: they hold plants in place and keep them in an upright position, in such a way that they do not fall. Therefore, whenever we look at wide and big trees standing tall and lofty, we remember the roots which held them.

◆ Roots grow with root hair roots that suck the dissolved nutrients of the earth via osmotic pressure. This fluid travels to the top of the plant via a complex process which is impossible to achieve by any chemical laboratory regardless of what apparatus and procedures it is equipped with. There must be light, water, carbon, oxygen, hydrogen, nitrogen, sulfur, potassium, magnesium and iron for plants to grow. All plants in the world feed on these elements, yet the earth produce sweet apples, bitter colicunths, soft tender smooth cotton, thorny Indian figs, wheat, barley, oranges, lemons, all from the same elements and water. A finite number of seeds and elements and innumerable different odors and tastes — minutely in this is a sign for people of understanding. — Most High says:

﴿وَسَيَكُنْ مِنَ الْعَشِيرِ مَنْ يُعْبِدُ مَا سَخَّرَ لَكُمْ مِنْهُ رِزْقًا فَاُولَئِكَ لَهُمْ عَذَابٌ عَظِيمٌ﴾
﴿يَعْلَمُ الْغُيُوبَ﴾



And gardens of vines and green crops, fields, etc. and date palms growing out two or three from a single stem root or otherwise, one stem root for every palm, watered with the same water, yet some of them we make more excellent than others to eat. Verily in these things there are Ayat for the people who understand. (Surah A'raf 13:4)

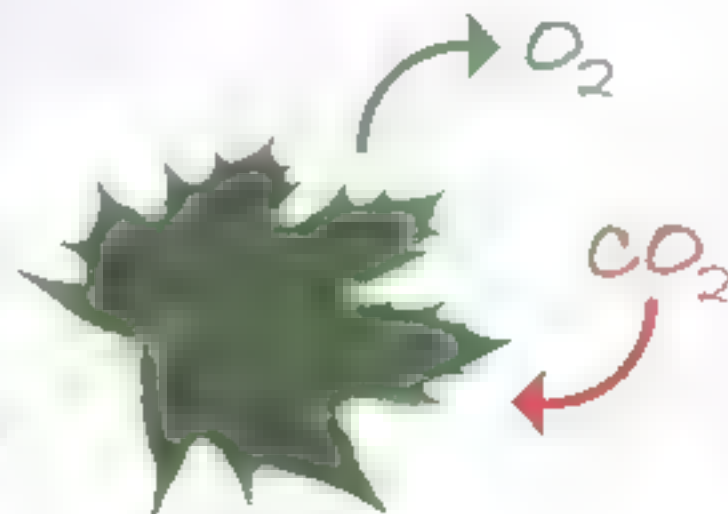
Transpiration

The power of the Creator becomes manifest if we consider the process of transpiration or the evaporation of water from the leaves of plants. This process aids in the movement of sap from the earth through the roots. This is not an insignificant process. Up to five hundred litres of water emanates normally from a single tree. When the temperature rises and the atmosphere is dry and the speed of wind increases, then the rate of transpiration also increases. The thickness of the atmosphere in the temperate region and copious rainfall in the tropical rainforest regions, which have a large number of trees, is attributed to transpiration.

Transpiration occurs via an opening on leaves. One of the wonderful signs of the Creator in this process is that we observe variation in the number of openings on the leaves of plants according to their environment. The number of openings on desert plants is low, that desert plant or forest plants leading to lower transpiration in the arid compared to the latter.

The openings, stomata, themselves are from the Signs of Allah, as each is made up of an opening between two guard cells. The guard cells protect the opening and control its opening and closing according to the needs of the plant. When the concentration of fluid in the guard cells increases, water is withdrawn from the two adjacent cells. The

guard cells get filled until they become rounded and thus the vent is closed and water vapour is held in it. It opens when water moves from the sun. However, when the sap of the guard cells is not concentrated, then its sides are pointed and its walls are in contact thereby with the hole. Lack of this concentration process is like a clock works with perfection and order and how its organs operate in a manner that speaks of power and perfection.



Formation of food

Among the Signs of Allah is the production of food in plants, this process is known as carbon synthesis. Carbon dioxide enters plants through the stomata from the atmosphere. It mixes with chlorophyll and water and forms carbon food substances due to the effect of temperature and light. The process of formation of these substances from carbon dioxide is an extremely complex chemical process which science has not been able to decipher as yet except to say that in presence of chlorophyll, water and heat results in reactions leading to the formation of food material. This does not occur except in the presence of sunlight. Therefore it is also known as photosynthesis. Scientists admit that this process is the most difficult and amazing

PHOTOSYNTHESIS



process which any form of technology—and it is not possible for any artificial process or equipment to accomplish what a single green leaf of any plant does.

Respiration in plants

It was discovered in 1782 that plants respire like *you*, *no* oxygen and *consume* carbon dioxide *as* like humans and animals. Respiration in plants is accompanied by a rise in temperature and occurs both during day time and a night. However, *the* *loss* *of* *heat* *is* *not* *apparent* *during* *the* *day* *as* *the* *rate* *of* *respiration* *is* *relatively* *low* *compared* *to* *the* *rate* *of* *photosynthesis* *which* *occurs* *in* *plants* *at* *a* *higher* *rate* *than* *respiration*. Thus, *a* *plant* *exhausts* *oxygen* *and* *releases* *carbon* *dioxide* *into* *the* *atmosphere* *during* *the* *night*. It is known that one should visit gardens, parks in the evening and visit by them

in the night when plants respire and there is no carbon synthesis is harmful, as carbon dioxide is released and plants take in oxygen

Research shows that the process of carbon synthesis on its own is sufficient for the exhaustion of all the carbon dioxide in the world, had it not been for processes taking place in Earth's layers. And, the unknown, the unknown, limited this process and made other forms of carbon and carbon dioxide. It did not leave the process of destruction and production of carbon to randomness, but decreed that the relative amount of carbon dioxide in the atmosphere remains between three to four parts in every ten thousand parts of the atmosphere. This proportion must necessarily be constant for the survival of the world. Regardless of the variations in the rate of the processes of destruction or production of carbon dioxide, its relative proportion in the atmosphere has never changed.

Adaptation in plants

Plants have been designed according to what suits their habitats in such a manner that can be accomplished by none other than Allah. Alone Each plant has a well-known habitat which differs intrinsically from those of other plants. Anyone who contemplates this diversity and adaptation is amazed at the Dominion of Allah. Bewowed and Exalted is He.



They are also known as xerophytic plants. They have the shape structure characteristics and adaptations that enable them to withstand storms and wind, high solar irradiation and high temperatures. In these trees or shrubs they are very rough having a lot of thorns and interwoven branches so as to shade themselves from the sun. They form a rounded structure thereby screening themselves from the sun as much as possible and thus protecting themselves from strong wind.

The leaves of these plants have thick cuticles with thick outer walls covered with a thick layer of dry material that is coated with a layer of wax. They also have stems and roots covered with thick bark. In some plants the stems and leaves are covered with thick hairs and filled with air from the base. This gives the plants a cottonous appearance which reflects the radiation of the sun, thus preventing transpiration or reducing it. The leaves of a plant may wrap themselves in such a manner that the direct perpendicular rays of the sun



do not fall upon it. The leaves of a plant may possess fewer stomata or narrow ones, they may also be covered with a layer of wax thus halting transpiration altogether. The plant therefore enters a state of dormancy until the rainy season returns. It is possible for the stomata to be found on the underside of the leaf; they could occur singly or in clusters in a single opening as in the Arabian jasmine, or the guard cells may form a roof over the stomata keeping it away from the atmosphere.



These plants also have special characteristics that enable them to obtain water. Their roots are relatively large, branching into the soil and going deep to great distances so as to cover a large volume from which it can suck water. They have special features which enable them to store water for their use during hot weather. They may store water in the plant parts in the earth such as bulbs, vines and tubers, or store them in their stems as in the date palm, or in their leaves as in the Indian fig. Glorified is Allah, the All-Knowing the Ever- Able! Among the Signs of Allah is that since the number of these plants is few and they are constantly exposed to the scorching heat of the sun, they have been provided with adaptation features to protect themselves from harm. These include the covering of its leaves, stem and fruits with thorns or stiff hair or an effusion of volatile oils which repel animals.

Aquatic Plants

Some plants live in water and most of their internal structures are an external form from other plants. This is how they adapt organs to the intake of water. They take up water all over their bodies and the shape of their stems changes, taking up a different shape.



Vipers (Climbing plants)

There are some types of plants with weak stems, that are not able to stand upright on their own. These plants have climbing apparatus which enables them to wrap around whatever supports they climb upon. Examples include the tendrils of grapes and green peas or thorns as in some types of rose or transverse roots by which they climb as in the pauper's rope.

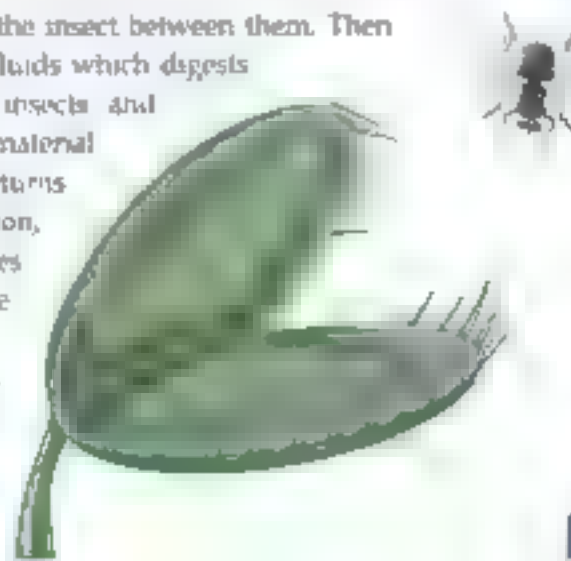


Insect eating plant

One of the Signs of Allah's creations which points to His Power, Glorified and Exalted is He, and the innovativeness of His Creation, is plants which feed on insects. These plants grow in soils that are very low in organic matter. Therefore, we observe that they have been provided with a mechanism that enables them to hunt insects and to suck their bodies for nutrition. It is truly amazing to note that each one of them has developed organs best suited to its prey.

◆ In certain plants we observe that its leaves move over a middle vein. Each leaf is provided with thorns on its upper surfaces. Whenever an insect falls on this plant, the two leaves are stimulated and close suddenly, trapping the insect between them. Then the plant secretes fluids which digest and dissolves the insects and sucks the digested material. Thereafter the leaf returns to its former position, opening its two leaves ready to trap more prey.

◆ In other plants, the leaves

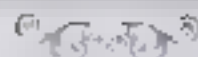


develop in the form of a jar made of covers which remain closed when the leaf is not developed fully. Then suddenly they open after the complete growth of the leaf. The jar is filled with acidic fluids excreted from glands on the inner surface of the leaf to attract insects. When the insects land upon the edges of the leaves they slip on its smooth surface or are attracted to the bottom of the jar by fine capillaries. Once it falls into the fluid in the jar, the lid closes to prevent it from escaping. The plant secretes fluids to digest the insect and then sucks it.

- The leaves of some insectivorous plants are covered with appendages whose ends terminate in glands that secrete sticky and acidic substances. When an insect lands upon these appendages, it gets stuck to it. The more it struggles to escape the more it gets entangled in other appendages until it is caught completely. Then the plant secretes digestive substances which dissolve the body of the insect. After sucking the fluid, the appendages return to their original position and the leaves to their original shape.

How do plants preserve their species?

One of the Signs of Allah is the ability of plants to ensure the continued existence of their kind. The fruit which is the nutritional vessel for the seeds is equipped with appendages which assist its dispersion from one place to another via several means. The seeds of desert plants which are transported by wind are usually small



in size and light to ease their transport by air. Tiny hairs or wing-like appendages may grow upon them to lighten their weight.

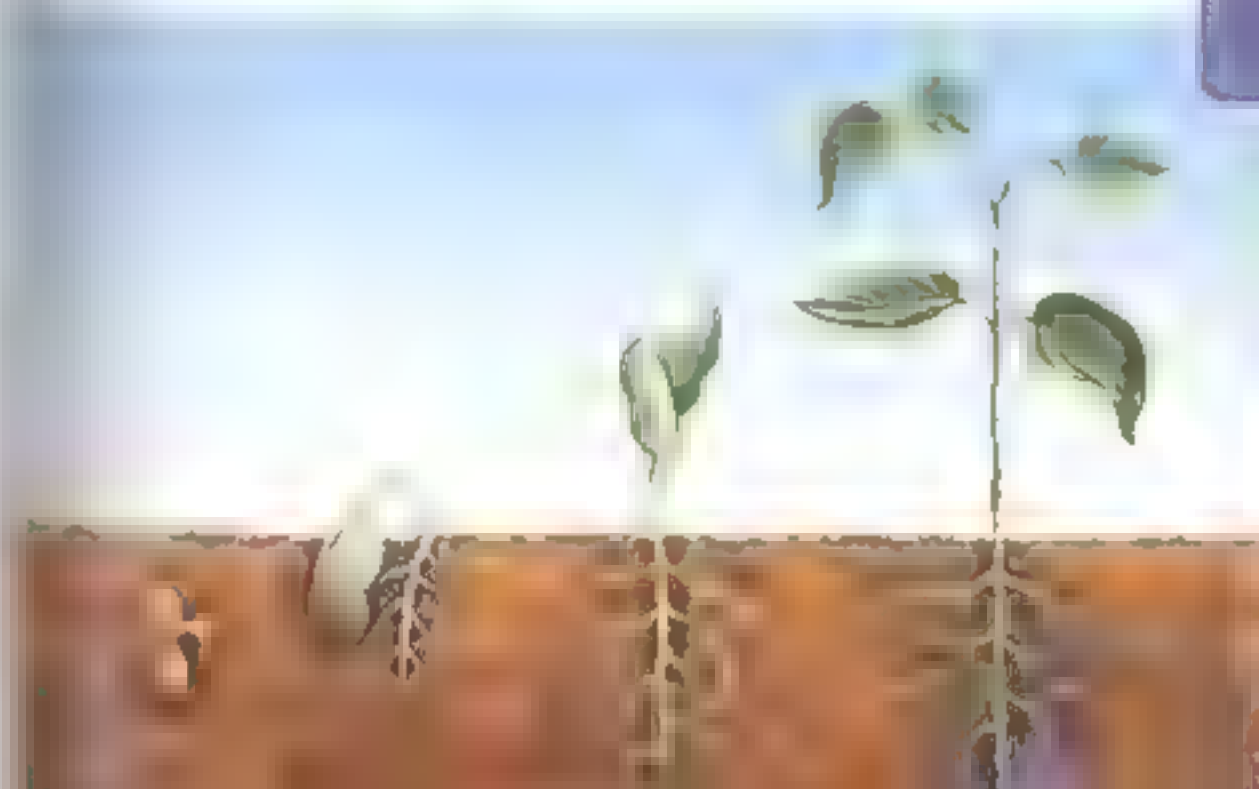
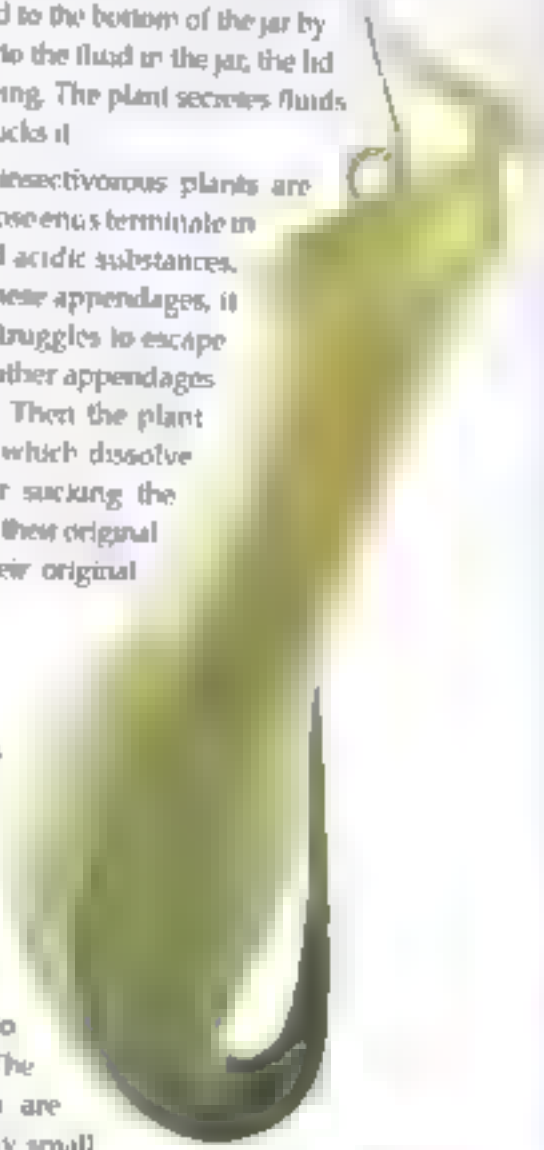
- The seeds of aquatic plants have appendages which enable them to float in water, and thick coats which prevent them from decay.

- There are species of seeds with attractive colors and sweet taste, others possess hooks by which they cling to the clothes of man or the fur of animals.

- Fruits of plants are cased by an envelope wrapped in a spiral manner after maturity. This enables the seed to be disseminated a distance away from the original one. Examples include beans, green peas, sweet clover and dandelion whose seeds explode with an exploding sound, which can be heard over a sufficiently long distance.

These are clear signs that plants are equipped with marvelous adaptive features to enable them to survive amid half a million species, varying in structure, reproduction, sustenance and lifespan.

There are plants which only live for a few days, some years and some whose lifespan exceeds the human lifespan many times over.



The box whose width is one hundredth of its height 20% and whose circumference is seven-thirds of 20% preceded issues (those who believe in it) and remains standing till the end.

The age of a tree trunk has been estimated at three thousand to 100 years. The longest living tree is probably the species which live for up to six thousand years (6,000 years).

In February 1956, E. F. Fawcett-Robertson, a renowned geologist, discovered a petrified branch of an ancient tree during an atmospheric survey he carried out at the Hantai Company in Jordan. After studies were conducted at a scientific laboratory in Paris, it became clear that the age of this tree was about one hundred and fifteen million years. Scientists explained the importance of this discovery which throws light on the issues of the age of universe, the history of succession of life on Earth and the temporal spread of all forms of life (plants, animals and man) on this globe (the one existing prior to the existence of the universe).

﴿وَلَا يَذْكُرُ إِلَى الْأَرْضِ كَيْفَ يُبْرِئُهَا مِنْ تِلْكَ الْأَعْيُنِ وَمَنْ يُخْلِقُ الْفَلَكِ﴾

Do they not observe the Earth, - how much of every good kind We cause to grow therein. Verily in this is an Ayah - proof or Sign - yet most of them (polytheists, pagans, etc., who do not believe in Resurrection) are not believers." (Soorah Shu'ara 26:7-8).

﴿وَلَا يَذْكُرُ إِلَى الْأَرْضِ كَيْفَ يُبْرِئُهَا مِنْ تِلْكَ الْأَعْيُنِ وَمَنْ يُخْلِقُ الْفَلَكِ﴾



A Discourse between Truth and Falsehood

Allah, Most High, says:

﴿وَلَا يَذْكُرُ إِلَى الْأَرْضِ كَيْفَ يُبْرِئُهَا مِنْ تِلْكَ الْأَعْيُنِ وَمَنْ يُخْلِقُ الْفَلَكِ﴾

"And on the Earth are Signs for those who have faith with certainty, and also in your own selves. Will you not then see?" (Soorah Adh-Dhakhirah, 5:20-1).

Dr. Masatuzah Al-Masriqi, one of the leading Indian physicists and mathematicians, renowned in the West for the discovery of several modern concepts and the first to propose the concept of Atomic bomb, said: "I left my house to catch some rest on a Sunday in 1900 C.E. Suddenly I saw the renowned astronomer, Sir James Jeans, a lecturer at the University of Cambridge, approached him and greeted him. He asked me: 'How are you?' I said to him, 'Your umbrella is not under your arm, it is under your foot.' Sir James smiled and opened his umbrella immediately. Then he paused for a moment and said: 'You must have some tea with me tonight.'"

"When I arrived at my house that evening, my daughter Miss James, came out at 4 o'clock and informed me that Sir James had been expecting me. When I entered his room, I found him in front of a small table with

test tips upon it. The moment it was fully exposed, I was thoroughly amazed. He noticed my presence he said: "What do you want?" Rather than waiting for my response, he started to give a lecture about sea creatures, cosmic bodies, their amazing order, their dimensions and dimensions of space spark my light. I felt my heart convulsing and I vowed to devote myself to the Most High.

As for Sir James I found the hair of his head standing up, perked up, blowing from his eyes and his hand is trembling out of reverence for the Creator. Then he stopped suddenly and said: "Whenever a theory is proposed about the marvelous creations of God, I find my entire self trembling for the Greatness of my God, whenever I bow before God and say "You are



Grandiose". I find every part of my essence corroborating me in this supplication of mine. I feel immense triumph, awe, and achieve a success which exceeds that of others more than a thousand times. Do you understand?"

Dr. Sayid al-Ashraf: "This lecture was sent a storm in my life and I said to him: 'Sir, I am deeply impressed by the scientific details you have narrated to me and I recollect in this regard a verse from the Holy Book: Allah! If you permit, may I recite it to you?' He nodded, so I recited to him the following Verse:

﴿الَّذِينَ هُمْ عَنْ آلِهَتِهِمْ كَارِهُونَ إِنَّ هُمْ مِنْ ذُرِّيَّتِهِمْ لَكَافِرُونَ﴾
 ﴿وَمِمَّنْ خَلَقْنَا الْأَنْثَاقَ وَالْمَرْجُوحَ مِثْقَالَ ذَرَّةٍ وَالْأَنْثَاقَ تَتَوَلَّى﴾
 ﴿الْوَلَدَ كَذِبًا﴾ إِنَّمَا يَتَّقِيَ اللَّهَ مِنْ بَيْنِ عِبَادِهِ الَّذِينَ هُمْ عَنْ آلِهَتِهِمْ كَارِهُونَ

"See you not that Allah sends down water (rain) from the sky, and We produce therewith fruits of varying colors, and among the mountains are streaks white and red, of varying colors and (others) very black. And of men and Ad-Dawwab (moving living creatures and beasts, etc.), and cattle, in the like manner of various colors. It is only those who have knowledge among His slaves that fear Allah. Verily Allah is Almighty, Oft-Forgiving." (Soorah Fatir 35:27-30)

Sir James asked in amazement: "What did you say?"

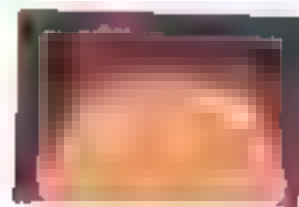
﴿إِنَّمَا يَتَّقِيَ اللَّهَ مِنْ بَيْنِ عِبَادِهِ الَّذِينَ هُمْ عَنْ آلِهَتِهِمْ كَارِهُونَ﴾

"It is only those who have knowledge among His slaves that fear Allah."

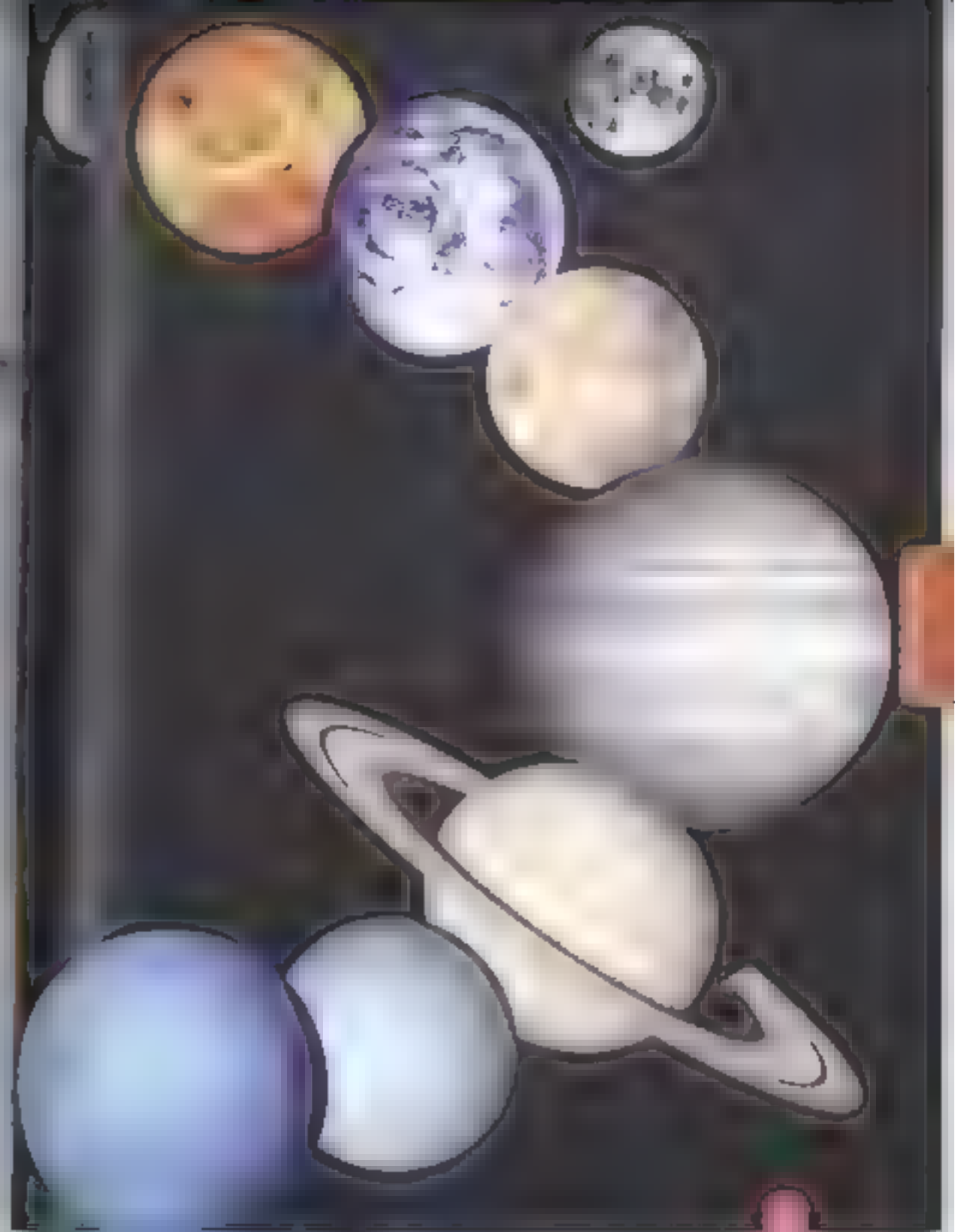
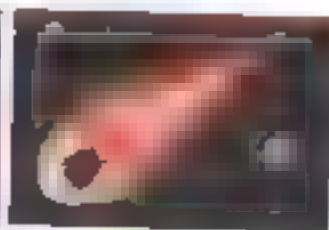
This is absolutely amazing! What you have revealed to me is what I have studied and observed for over fifty years of research. When informed Muhammad about it?


﴿الَّذِينَ هُمْ عَنْ آلِهَتِهِمْ كَارِهُونَ﴾





Scientific Miracles in the Space





Scientific Miracles in the Space

In the middle of the twentieth century, the scientific contest to explore Space, the orbits and galaxies commenced among the developed nations. The race to conquer space virtually reached war-footing, given the level of challenges and conflicts between world powers due to their struggle for dominance in this field of study.

Surprisingly, each time the world makes a breakthrough in unraveling the universe, we increase in certainty that the One Who created this universe is the One Who revealed the Qur'an.



been in existence since a gigantic explosion known as the Big Bang occurred some 10 to 20 billion years ago.

In the beginning, the universe was in the form of an intense hot and dense ball of fire made up of gases, expanding and cooling after roughly every one million years. The gases began to get denser, massing up in rings. These formed the emerging galaxies. With the passage of several billion years, the universe has continued to expand though some of it contains particles of matter tightly bound together due to strong gravitational pull like several of the massive galaxies.

At present, astronomers do not know for certain whether the universe is a closed system, i.e. will it eventually stop expanding and begin to shrink or an open system, i.e. will it continue to expand endlessly?



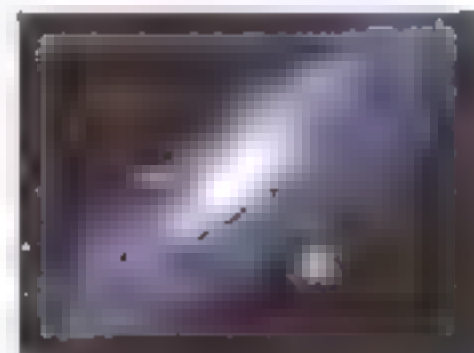
Facts about the Universe

The Universe

The universe includes everything in existence, ranging from the minutest of particles which are smaller than atoms to the massive and magnificent clusters of galaxies. The size of the universe is not known to anybody; however, the most popular theory about the origin of the Earth is the "Big Bang Theory" which posits that the universe has

A galaxy is a gigantic cluster of stars and nebulae formed from the matter dispersed between the stars. There are three categories of galaxies based on their form (shape)

(i) Elliptical galaxies with





spiral shape

(ii) Helical galaxies with arms winding spirally toward the exterior as though exploding due to central centrifugal swelling

(iii) Irregularly shaped galaxies possessing no definite shape

However, the shape of a galaxy could change sometimes due to its collision with another galaxy.

Quasars are compact bodies which produce a lot of light and are considered to be the core of galaxies, except that they are so far away that their true nature is difficult to ascertain as they fall outside the realm of the known universe.

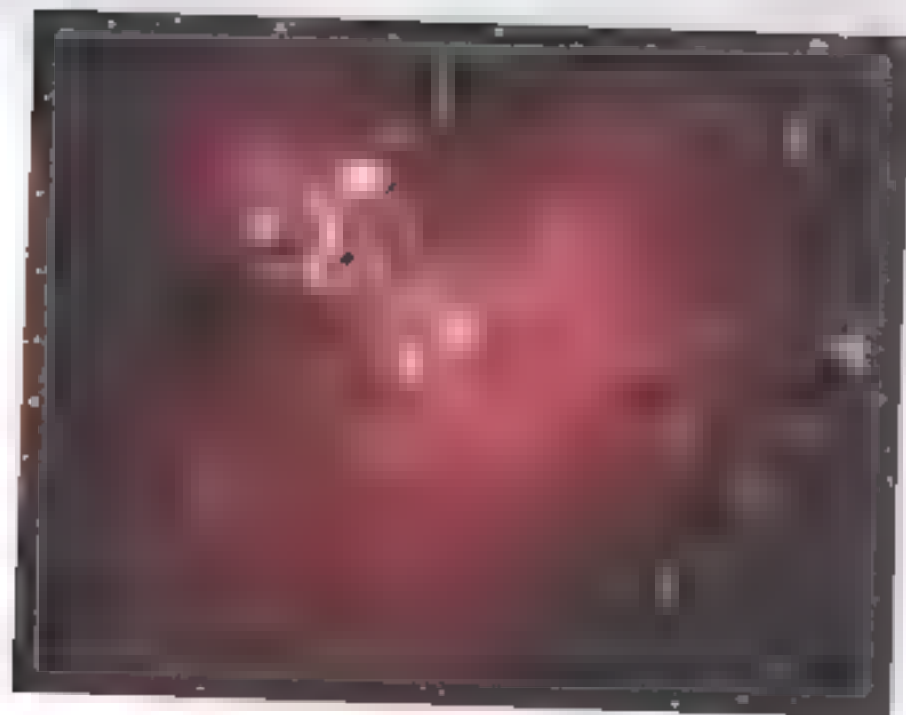
The farthest known quasars (similar to stars) are found at a distance of 15 billion light years away. It is believed that radiation from energetic galaxies and quasars are due to black holes.

This is the name given to the pale luminary band stretching from one end of the nightly sky to the other. This illumination comes from the stars and nebulae within our galaxy, which is often referred to as the Milky Way.

The Milky Way is a helical galaxy made up of a dense central region swelling outwards by four arms spirally winding toward the exterior. This is surrounded by a less dense halo. From our position on Earth we are unable to observe this helical shape because our Solar System lies in one of these spiral arms, referred to as the "Giant Arm". Hazy and dusty clouds completely obscure the center of the galaxy thereby allowing us no visual picture or map of the galaxy except a very limited one.

The central centrifugal swelling is a relatively small but dense ball. It consists mainly of ancient stars emitting red and yellow beams of light. The halo on the other hand is a sphere consisting of the oldest stars, some of which are as old as the galaxy itself (up to 15 billion years old). Frequently the spiral arms consist mostly of young, hot blue stars and nebulae clouds of gases and dust from which stars form. The galaxy is gigantic in its vastness and revolves with all its contents in space in such a manner that stars within it move at a greater speed than stars outside it. The sun is at a distance from the center of the galaxy by two-thirds ($2/3$) of the radius of the galaxy. It completes its revolution about the galaxy once in roughly 220 million years.





Nebula: This is a cloud of dust and gases existing within a galaxy. A nebula becomes visible when its constituent gases glow or when its cloud of dust and gases reflect the light of stars or when they obscure light rays from much farther sources.

A light emitting nebula glows because its gases are excited or because it just reflects rays emanating from stars within it or from stars in other regions. It is said to be dark nebula on the other hand, becomes visible in the form of shadows when they obscure light rays emanating from a glowing nebula or stars behind.

There are also nebulae accompanying extinct or dead stars.

Stellar Nebula and residue of explosive stars: Each is composed of dilated gaseous residue.

Stellar Nebula: These are gaseous envelopes swept away from an extinct stellar core.

Giant Glowing Residual Nebulae: These are gaseous envelopes swept far away from a stellar core at great speeds due to an enormous explosion, the explosion of the giant residual nebula itself.

Stars usually occur in agglomerations known as star clusters. It is possible to distinguish between disorderly / loose stellar clusters usually made up of a few thousand young stars (which originate from the cloud itself and thereafter each farther away from the others) and densely packed spherical stellar clusters containing hundreds of thousands of ancient stars.



Stars are made up of glowing hot bodies of gaseous matter, which originate from within the nebulae. They vary extensively with regards to size, compactness and heat. The color of a star is determined by its heat, the hottest of stars are blue in color while the coolest are red. The sun, which has superficial surface temperature of 5500°C falls in between the two extremes and thus appears yellow in color.



The origin of energy radiating from a star comes from the nuclear fusion which occurs in the core of the stars.

The major clusters exhibit the characters of the so-called cardinal stars that which fuses hydrogen to produce helium, their huge and gigantic stars and their white hearts.

Neutron stars and Black holes

Neutron stars and Black Holes are formed from the core of stars, which remain as it is after an explosion. They form in the shape of large colonies. When the mass of the surviving core is roughly one and a half times the mass of the sun and about three times the mass of the sun, it shrinks and forms a neutron star. But if its mass is much greater than three times the mass of the sun, it shrinks and forms a black hole. The diameter of neutron stars is roughly 10km only. They are made up



of very small particles (smaller than atoms) known as neutrons. These are very dense stars with a teaspoon-full of their material weighing about a billion tons.

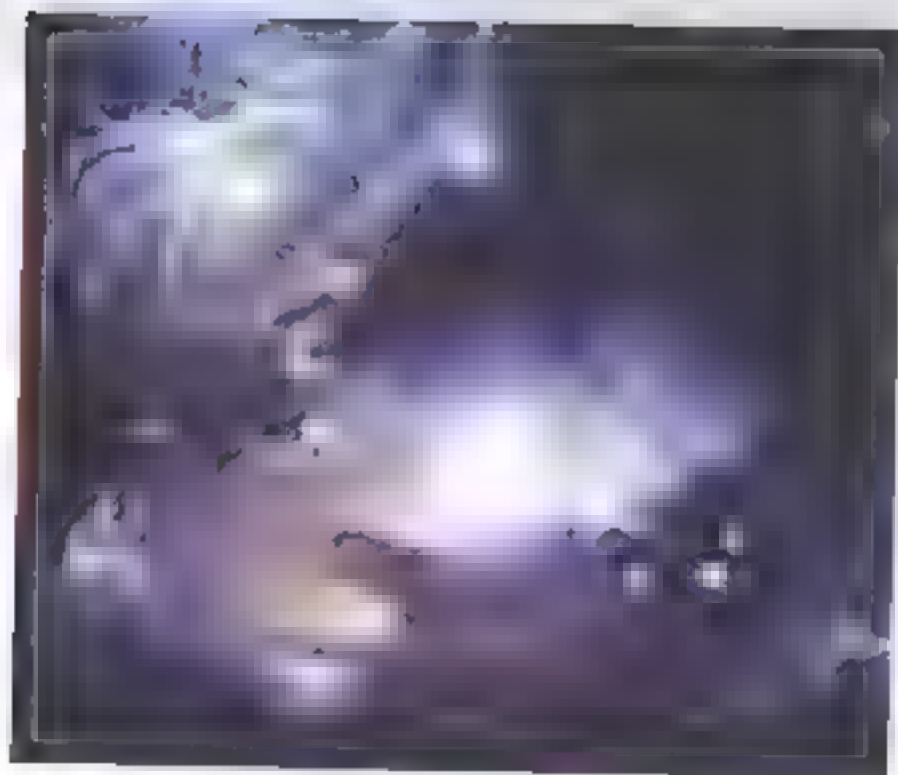
Detailed observations show neutron stars as pulsating sources of radio waves known as pulsars. They are so called because they revolve about their axis at extreme speeds between two limits bursting across the sky and becoming visible as pulses.

From another perspective, Black Holes differ from neutron stars by the strength of their gravitational pull, which reaches levels such that not even radiant light can escape from it. This is why Black Holes remain invisible bodies. Despite this, it is possible to illuminate them when there is an adjacent star nearby. This happens because the Black Hole attracts gases from the star and thus, a hazy, disc-like buildup of material grows around the Black Hole and revolves around it at great speeds. This raises its heat and it releases its radiant energy. Eventually, this gaseous material whirls inside the Black Hole becoming a part of it and part of the invisible universe.

These are magnificent stellar patterns which we observe in the sky every night from different localities. It is not necessary that such constellations be bound by a physical relationship; usually most of these stars are not close to one another. In fact, they usually do not fall into a single stellar cluster. Some of the stars of a constellation may be relatively close to one another

from the Earth while the others are at relatively great distances from the Earth. What we know of the stars of any single constellation is that they appear on the Earth in a particular direction.





Life on the Stars

Allah, Most High, says

﴿وَمَنْ يَعْصِ أَمْرًا مِنْ أَمْرِ رَبِّهِ يَسْتَبِشْ بِمَا يَسْتَبِشُّ الْمَلَائِكَةُ وَالْمَلَائِكَةُ وَهُمْ لَا يَسْتَكْبِرُونَ﴾

"And before Allah prostrate all that is in the heavens and all that is on Earth, of the moving (living) creatures and the angels, and they are not proud (i.e. they worship their lord (Allah) with humility)." (Soorah An-Nahj 16:49)

The angels are not included in the meaning of the word "Dabbah" (moving creatures) because they do not crawl on the Earth or walk on feet and the word "dabbah" also refers to the very creatures composed chiefly of water and having limbs and organs based on it as saying

﴿وَاللَّهُ خَلَقَ كُلَّ دَابَّةٍ مِنْ مَاءٍ مِنْهُنَّ مَنْ يَمْشِي عَلَى بَطْنِهِ وَمِنْهُمْ مَنْ يَمْشِي عَلَى رِجْلَيْنِ وَمِنْهُمْ مَنْ يَمْشِي عَلَى أَرْبَعٍ وَاللَّهُ مَا يَشَاءُ إِنَّ اللَّهَ عَلِيمٌ ذَكِيمٌ﴾

Allah has created every moving (living) creature from water. Of them there are some that creep on their bellies, and some that walk on two legs, and some that walk on four. Allah creates what He wills. Verily Allah is Able to do all things." (Soorah An-Noor 24:45)

Thus is what the Noble Qur'an points to. So what does Science say about this?

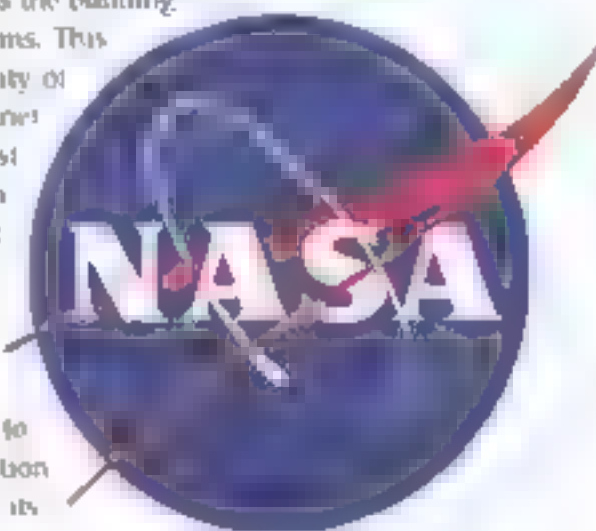
◆ Some astronomers say: It is not strange that some celestial bodies should be inhabited by life, rather it would be strange if they are not.

In 1970, NASA announced in California that a meteor that had landed in Australia the previous year contained some amino acids, which are regarded as the building

block of basic life forms. This indicates the possibility of life beyond the planet Earth. In 1974, the first message (in the form of signals) was sent into the universe. Its transmission lasted 3 minutes.

This message was designed to provide information about the Earth and its surroundings.

This activity drew the attention of the whole world, as it was an issue of significance to mankind as a whole and not just to the nation launching it.



The Moon
and
the Sun

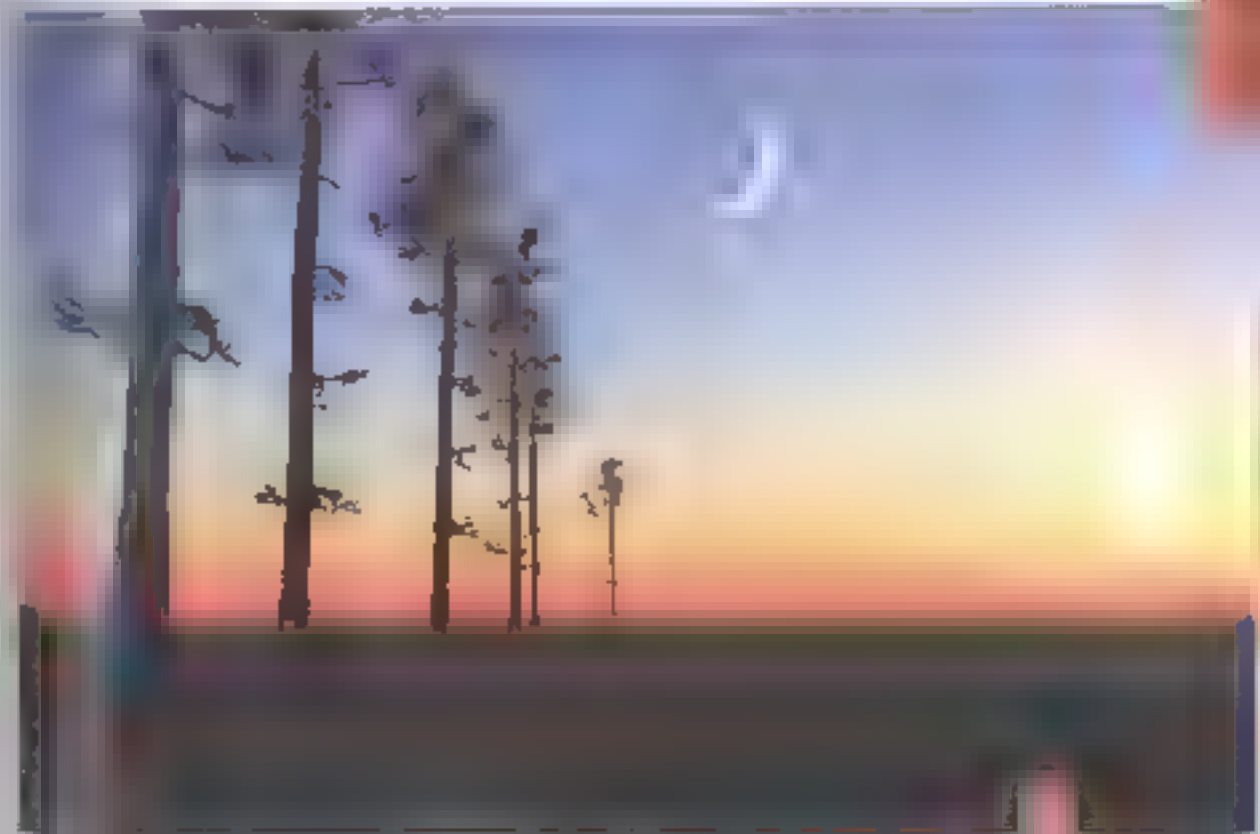
A History of the Earth and the Sky

John G. Gribbin



And the sun runs on its fixed course for a term appointed! That is the Decree of the Almighty, the All-Knowing. And the moon we have measured for transitions to traverse till it returns like the old dried curved date stalk. It is not for the sun to overtake the moon, nor does the night overstep the day. They are fixed each in its orbit. Speech is to be seen 36:38-40

﴿ وَنُفِثْ مِنْهُمْ بِمُحَمَّدٍ ﴾

[illegible]

﴿وَلَا تَسْبِقُ الشَّمْسُ الْقَمَرَ﴾

"It is not for the sun to overtake the moon

so the moon is ahead of the sun or vice versa. Despite the moon is also an orb running and is not taken back as the speed of the moon is 1.5 kilometers per second and while that of the earth is 30 kilometers per second and the speed of the sun is 12 kilometers per second. Thus as fast as the sun orbits, it will not overtake the moon. However, what makes the moon maintain its speed?

Is it possible for it to move onward and abandon its path?

It was found that the moon moves in a curved winding manner and does not maintain a particular path. Just contemplate the motion of the moon. The sun, the Earth, and the stars are in motion; were their relative speeds to alter, then a day will come when we would query "Where is the sun?" and the answer would most likely be "It is twenty stations far today." Then possibly someone would come after a year and say "Where is the sun?" and we would respond "It has lost its way."

So contemplate upon who has set every celestial body in motion in such a precise manner?



SUN EAT



﴿وَكُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

and they all float, each in an orbit."

They float and preserve their orbits, speed and position. Whose making is this? Undoubtedly, this is the Decree of the Almighty, the All-Knowing! Is this decreed or not? Or is this order coincidental? Definitely not, it surely emanates from a deliberate intent. It is a decree from the One Who is Ever Capable, Omnipotent and Exalted. He placed each thing in its position and makes it run its course.

﴿وَلَا يَعْزُبُ عَنْهُ لُحُوقٌ بِهِمْ أَوْ نَجَاتٌ مِنْهُ﴾



The movement of the sun

Is the sun stationary? even though it may appear to be stationary, the answer is: No, it is not.

Astronomical observations show that the sun floats in space at an estimated speed of 30 kilometers per second in the direction of a star known as "Hercules". Therefore, the Earth's orbit about the sun is a helical one and not elliptical. In its yearly motion, the sun passes by twelve conglomerations of stars called constellations, every month.

He, Most High, says:

﴿وَالشَّمْسُ كَرَّةٌ يُدْهَرُ لَهَا فِي يَوْمٍ ذُنُوبًا كَثِيرًا وَلَهُ فِي يَوْمٍ ثَوَابٌ كَثِيرٌ﴾

"And the sun runs on its fixed course for term appointed. That is the Decree of the Almighty, the All-Knowing." (Soorah Ra Seen 36:38)

The Sun: A blazing celestial body

When mentioning the sun, the Noble Qur'an usually describes it as a *Shajjar Muneer* (a radiant lamp). Being a lamp and being radiant are two constant attributes of the sun.

He, Most High, says:

﴿بَارَئٌ الَّذِي يَجْعَلُ فِي السَّمَوَاتِ كُتُبًا وَيَجْعَلُ فِيهَا شَجَرًا مُنِيرًا﴾

"Blessed is He Who has placed in the heavens big stars (stellar constellations) and has placed therein a great lamp (sun), and a moon giving light." (Soorah Al-Furqan 25:61)

We notice that wherever the Qur'an talks about the moon, it always describes it as luminous. Thus, luminosity is a constant attribute of the moon. If we turn to the Arabic language to contemplate the fine meanings of the words *Shaj* (lamp), *Munir* (radiant or light giving) and *Muneer* (luminous) and to appreciate the difference, we find that a thing is not described as a lamp or radiant except that it reflects light without heat and also, light emanates from it. And you say it is *Muneer* (luminous) when it reflects light falling on it from another celestial body. Based on this linguistic exposition, the Verse implies that the sun is a blazing, burning celestial body and that the moon is a cool celestial object which obtains its light from the sun.

Proliferation of Sun

Allah, Most High, says:

﴿وَمِنْ آيَاتِهِ اللَّيْلُ وَالنَّهَارُ وَالشَّمْسُ وَالْقَمَرُ لَا تَسْجُدُوا لِلشَّمْسِ وَلَا لِلْقَمَرِ وَاسْجُدُوا لِلَّهِ الَّذِي خَلَقَهُنَّ إِنِ كُنْتُمْ تَعْلَمُونَ﴾

"And from among His Signs are the night and the day, and the sun and the moon. Prostrate yourselves not before the sun nor before the moon, but prostrate yourselves before Allah who created them, if you (really) worship Him." (Soorah Fussilat 41:37)

The letter "noon" indicating feminine form also signifies plurality in His saying: "Khulufukum". It is also an indication of the existence of

several suns and moons and this is what science establishes

In space, several solar clusters run along with their stars, which are similar to our sun but bigger. Each star has one or more planets which accompany it. Glory be to the One Who controls these celestial spheres of ordered orderliness. Astronomers have discovered that the number of these suns exceeds 2 million. This is what has been discovered. But what about that which is undiscovered as yet:



... a blaze then put out

Science has revealed that the moon was once ablaze and burning, and then its light and blaze were extinguished. This was not known until recently. It came to be known after sophisticated instruments and technology became available to researchers. However, this has been mentioned in the statement of the Most High:

فَاَوْحَيْنَا إِلَيْكَ وَالْقُرْآنَ فَخُذْ بِهِ لَئِنْ رَأَيْتَ النَّاسَ يَعْصُونَكَ أَمْرًا فَقُلِ هُوَ مِنْ أَمْرِ رَبِّي أَعَدْتُ لِلْكَافِرِينَ عَذَابًا مُّهِينًا ﴿١٠٠﴾

And We have appointed the night and the day as two Ayaat. Then, We have obliterated the sign of the night (with darkness) while we have made the sign of the day illuminating, that you may seek bounty from your Lord, and that may know the number of the years and the reckoning. And We have explained everything (in detail) with full explanation." (Soorah Al-Isra 17:12)

The sign of the night is the moon and that of the day is the sun. "We have obliterated the sign of the night" i.e. the Creator put out and extinguished its light. Extinguishment does not occur except that it had once been luminous. From this, we come to realize that the moon was once blazing but was later extinguished.



This discovery had been made upon the tongue of "the authority of the Ummah", Abdullah Ibn 'Abbas, may Allah be pleased with him, when he said: "The moon was luminous just as the sun is luminous and the moon is the sign of the night while the sun is the sign of the daytime – (then we obliterated the sign of the night) – i.e. the darkness on the moon." And Allah knows best and He is Most Wise.

• Shaikh Az-Zaidani said: "There was a documentary film produced by an American firm about the efforts of America to conquer the moon entitled *4 Giant Steps: Investigating the Geology of the Moon*. The film showed how the American experts were able to discover that the moon was once brightly lit. It was a burning sphere, which later cooled. It also showed how they demonstrated this fact by sending instrumentation to the moon in order to measure waves emanating from it. They generated sound waves and the waves

that if it is clear the moon is the chosen heavenly sign, the moon is a burning sphere and has not scattered rock specimens from outside the moon from its surface, mountains and the valleys on it with an explosion and scattering the surplus was easily made conclusion that the moon was once burning but is now extinguished"

Said in verse a more solid sign the two days and nights and be the statement of Allah, the Exalted and Glorious, the revealer of the statement of Allah

﴿وَجَعَلْنَا لَيَالٍ وَنَهَارًا فَاِذَا جَاءَ الظُّلُمَاتُ رَأَوُا النُّجُومَ﴾
 ﴿فَلَا مِنْ دُونِهَا إِلَهٌ يُعَذِّبُ الْمُذِلَّةَ﴾

And we have appointed the night and the day as two Ayat. Then we have obliterated the sign of the night with darkness while we have made the sign of the day illuminating, that you may seek bounty from your Lord and that may know the number of the years and the reckoning. And we have explained everything in detail with full explanation. (Soorah Al-Furqan 25:61-62)

Muslim scholars such as Ibn Arabi, may Allah be pleased with him and others have said: The sign of the night is the moon and the sign of the day is the sun.

﴿فَاِذَا جَاءَ الظُّلُمَاتُ﴾

"Then, We obliterated the sign of the night."

He said the moon was so luminous and then its light was extinguished

﴿فَاِذَا جَاءَ الظُّلُمَاتُ﴾

Then We obliterated the sign of the night with darkness while We have made the sign of the day illuminating."

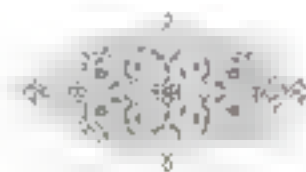
This is why He, Most High, says:

﴿فَاِذَا جَاءَ الظُّلُمَاتُ﴾

He said the sign of the placed in the heavens big stars (stellar constellations) and has placed there a great lamp sun and a moon giving light" (Soorah Al-Furqan 25:61).

The Qur'an come from Muhammad, peace and blessings of Allah be upon him. From an enlightened man, it was to say, said he placed therein some signs, two lamps, a lamp for the day and a lamp for the night. A lot of people have said and argued who will have an eye for him? However the Qur'an is from the All-Knowing, the All-Wise, thus He said: "And He placed therein a great lamp, the sun and a moon giving light". That the luminance of the moon is mentioned after the mention of the great lamp indicates that the moon illuminates as a result of the light of the great lamp. Glorified is Allah, the Almighty!

(Al-Furqan 25:61-62)



It is about two million light years away from us. Thus the light which we observe from the galaxy emanated from two million years ago.

Even man had not even existed upon Earth. The light reaching us at present time enables us to view it as it was two million years ago. We do not know anything about its present state. Definitely, it must have moved away from its position. This is also true for all galaxies in the universe. And Allah knows best.



Allah, Most High, says in His Noble statement:

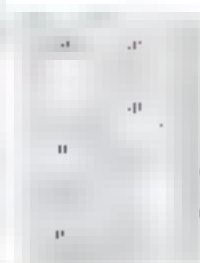
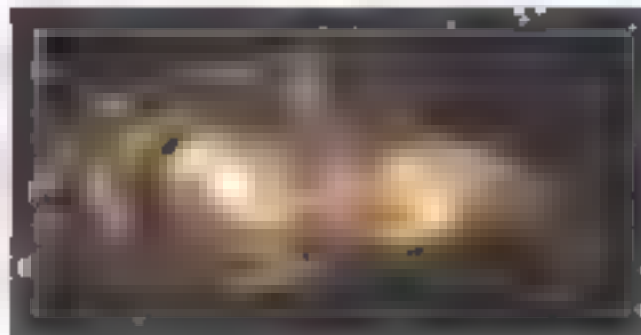
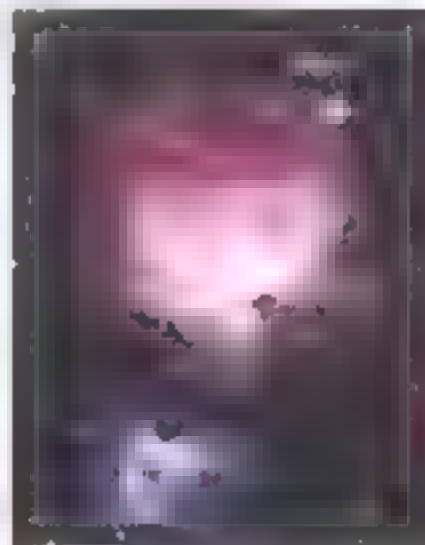
﴿أَلَمْ نَقْرَأْ لَهُمْ إِذَا سَخِرَ مَعَهُمْ جَبَرٌ أَفْئَدُهُمْ بِرَبِّهِمْ وَأَنَّهُمْ كَانُوا مُرْجُونَ﴾

"Have they not looked at the heavens above them, how we have made them and adorned them, and there are no rifts in them?" (Soorah Al-Hajj 16-17).

And His statement:

﴿وَلَقَدْ بَعَثْنَا فِي هَذِهِ أَسْمَاءَ ذُرِّيَّتِهِمْ لِيَتْلُوا عَلَيْهِمْ آيَاتِنَا وَلِيُبْلِيَ اللَّهُ بِهِمُ الْأُمُورَ﴾

"And indeed We have put the big stars in the heavens and We beautified them for the beholders." (Soorah Al-Hijr 15:16)





Verses regarding the Universe in the Noble Qur'an



Certainly, the Noble Qur'an is a book of guidance revealed by Allah, the Mighty and Sublime, to clarify issues which the human mind cannot on its own comprehend. Examples include the essentials of

faith and worship, the fundamentals of manners and the law by which men will conduct their interactions. Added to these, the Noble Qur'an discusses issues related to the universe: things such as the skies, the earth and its constituents (e.g. moons, planet, star, nebulae etc), their positions and the distances between them. The thousand verses with the intent to manifest the limitless Power and Authority of the Creator and His Perfect Knowledge and Wisdom, the Creator of this universe and the One capable of obliterating it and re-inventing it.

Thus, the verse of the Noble Qur'an having reference to the universe was not intended to provide scientific basis since Allah the Mighty and Sublime intended that the process of gaining knowledge is through observations, research and experimentation over long periods of time due to the limitations of human perception and the accumulative (progressive) nature of knowledge. Despite that, the verses of the Noble Qur'an necessary contain several indisputable scientific facts about the universe since it is a revelation from the Creator, the Mighty and Honored, and therefore it is absolute truth.

Four hundred and sixty-one of these verses mention the sphere of the earth, either describing its entirety or specifically stony external crust or weathered material above the fresh bedrock. As for the verses having geologic information about the earth, they are over one hundred and ten and can be grouped into eleven categories.

1. A single verse, which mandates mankind to voyage on the earth, observe it and make deductions from his observation regarding the origin of creation.



Verse 7, Qur'an 77 Verse 27, Qur'an 79 Verse 32

According to the theory of isostasy, which explains the way mountains have been erected such that they stand above the Earth's surface. These observations led to the formulation of the theory of isostasy, the equilibrium of pressure in all directions, which explains the erection of mountains and other elevated landforms on the Earth's crust.

up of clearly distinct white, red and pitch-black constituents

Text Verse explicitly points to the existence of rocks (mountains) whose major constituent is granite which comes in all shades of white and red and has a kalini (maur) and pink (pink) basal and gabbro with mineralogy of magnesium which is dark colored (each of the major (primary) layers of rocks has had a history of history and mineralogy related to the degree of heat (during its formation) which manifests in its secondary and tertiary derivatives among sedimentary and metamorphic rocks. Thus, the importance of their three colors (white, red and black) in the constitution of volcanic rocks and its derivatives becomes clear.

7. Group of Verses regarding the two Earth envelopes: the aquatic and atmospheric envelopes. The Noble Qur'an clearly mentions both originated from with the solid earth. Qur'an 79 Verse 4 and 5. This was only known recently. Other verses in this group speak about special attributes which enable the atmospheric envelope to preserve life on the Earth. Qur'an 21 Verse 32. Qur'an 86 Verse 1. Yet others mention the pitch dark nature of outer space. Qur'an 5 Verse 14-5, the decrease of atmospheric pressure with height above the Earth's surface. Qur'an 6 Verse 25. Yet others talk about the original nature of the night due to be blazing of the moon before the formation of the atmospheric envelope.

8. A group of Verses which describes the thin crust of the Earth. Qur'an - verse 19, the numerous thin layers and leveling of

On Earth's surface, the progressive alternation of the geographical continents – oceans and – over the process of self-absorption, subduction – plates of plate tectonics, which supports the Earth as a whole and is related to the destruction of its crust. Our an 13 Verse 4, Our an 21 Verse 44, Our an 78 Verse 6

9. Verses which confirm that the source of ground water is rainfall, such as the 45th Isaiah 48: 1-5, verse 32, Job 41: 22 Verse 5, and others which make a link between life on earth and water Job 1: 7, verse 40 Job 41: 24 Verse 49, and Genesis 1: 10-12, to be possibly classifying the forms on Earth Job 41: 6 Verse 38

10. Verses which establish that the creation of the Earth occurred
 over a long period of time in successive stages. Surah al-Furqan verses 4 and
 12, Qur'an 32 Verse 5.

11. Two Verses which describe the end of our Solar System by a process which is the reverse of the creation known as the Big Crunch. Qur'an 21 Verse 104 Thereafter, the creation of the universe Qur'an 14 Verse 48

All these were unknown prior to the previous century (i.e. 20th century), and we have not begun to comprehend except the little from scientific observations which have come from detailed analysis and study.

The attestation of the Noble Qur'an as possessing a comprehensive and detailed knowledge indicates only one thing, a real proof of the Mission of the Noble Book, Qur'an, which is the last of the Divine revelation to mankind and the message of Monotheism preserved in the exact integrity of revelation since it was first revealed for better for better for over fourteen centuries of history.

It is obvious from the discussion that the number of verses of the Qur'an which possess geologic indications exceed one hundred and ten. This is deserving a voluminous book of detailed discussion. Hence we shall concentrate only on what has been mentioned previously and on some of these verses which establish facts and principles in sciences. We have mentioned these as an example of the miraculous nature of the Noble Qur'an.



During the middle of the 20th century several nations began a race to extensively explore and unravel the mysteries of cosmic space orbits and galaxies. This naturally led to conflicts and tensions between the world powers, as each desired to surpass the other in its understanding and dominance of the outer space.

Strangely enough, as the world progressed in understanding the universe it became more certain that the creator of the universe is the One Who revealed the Qur'an. The Verses of the Qur'an present this in the form of an extraordinary Divine revelation revealed fourteen centuries ago which penetrates the screens of the Unseen and the information regarding the future. We shall soon present examples related to the orbits, that have only been recently discovered. Allah

﴿وَلَقَدْ يَكُونُ﴾

And you shall certainly know the truth of it after a while"

(Soorah Sad, 38:88).

Whenever the Qur'an mentions the heavens it is in fact referring to the universe, because (in Arabic) heaven refers to anything above us.

The Qur'an broaches the subject of the origin of the universe and describes it in a remarkable way. Allah, Most High, says:

﴿أَوَلَمْ يَكُنْ لَهُمُ الْيَوْمَ أَنْ يَحْكُمُوا فِي الْحَقِّ﴾

Have not those who disbelieve known that the heavens and the Earth were joined together as one united piece, then We parted them?" (Soorah Al-Anbya 21:30).

"*Al-tuqa*" means joining together, assembling and merging. "*Al-tafa*" is the disconnection between two merged things. Thus, just as it is understood from the Verse that the Earth and heavens were fused together then Allah separated them, so have the Muslim scholars indicated this in the past. Ibn Abbaas, may Allah be pleased with him, said: "They were both glued together, then Allah raised the heavens and lowered the Earth."

Modern science describes this tribal union and separation in a marvelous manner: the theory of redshift. Most of this theory is recognized as scientific fact today. The basis of the theory originated from the spectra scientist Hubble in 1929 and it states that the

into the heavens. Anyone who ponders over the Verses of the Noble Qur'an is confronted with several facts:

1. The mentioning of night always precedes the mention of daytime in the Noble Qur'an: Qur'an 2 Verse 161 and 174, Qur'an 2 Verse 2 and 40, Qur'an 6 Verse 3 and 6, Qur'an 9 Verse 24 and 6, Qur'an 13 Verse 1 and 2, Qur'an 17 Verse 12 and 14, Qur'an 25 Verse 46 and 48, Qur'an 27 Verse 81, Qur'an 34 Verse 44, Qur'an 35 Verse 4, Qur'an 37 Verse 86, Qur'an 40 Verse 6, Qur'an 45 Verse 5, Qur'an 50 Verse 6, Qur'an 69 Verse 1, Qur'an 71 Verse 5, Qur'an 78 Verse 7 and 20, Qur'an 79 Verse 1 and 2, Qur'an 79 Verse 26 and Qur'an 92 Verse 1 and 2.

2. The sun has also been mentioned before the moon in the Noble Qur'an: Qur'an 12 Verse 4, Qur'an 27 Verse 8, Qur'an 29 Verse 6, Qur'an 35 Verse 5, and Qur'an 75 Verse 9.

3. Whenever the night, daytime, the sun and the moon are mentioned in the same thread of text, the mention of night necessarily precedes daytime and the mention of the sun precedes that of the moon. This is evident in twelve instances in the Noble Qur'an: Qur'an 7 Verse 54, Qur'an 11 Verse 5 and 6, Qur'an 13 Verse 2 and 3, Qur'an 14 Verse 33, Qur'an 16 Verse 12, Qur'an 21 Verse 33, Qur'an 25 Verse 6 and 62, Qur'an 31 Verse 29, Qur'an 35 Verse 5, Qur'an 36 Verse 3, and 40, Qur'an 39 Verse 5 and Qur'an 41 Verse 37 and 38.

As a consequence, it comes to our conclusion that these Qur'anic facts are in perfect agreement with established scientific facts, which say that the universe is in a perpetual night. This is its natural essence. What it is a bare star whose emanating light cannot be seen except when reflected by other diffuse celestial bodies. It is observed that the Qur'an is contrary to common ignorance for the one who has no prior knowledge of the cosmos, which expects a descriptive logical order of relationship of the night to the moon and the daytime with the sun. This is because these Verses are the words of the Exalted and Glorious and Exalted is He – the Creator of all things.

The importance of knowing these facts is in order to comprehend the wisdom behind such verses with other Verses: Qur'an 11 Verse 114, Qur'an 17 Verse 78, Qur'an 20 Verse 130, Qur'an 93 Verse 1 and

2, Qur'an 71 Verse 16, Qur'an 6 Verse 96, Qur'an 91 Verse 1 and 4. Perhaps someone may object that this is only when he considers all these verses in the Qur'an, while the one who has preceded him and Allah, the Exalted, knows best.

Stellar orbits

Allah, Most High, says

﴿لَا تَسْبِقُ السُّجُودَ لَكَ الْكَوْكَبُ وَالْقَمَرُ وَالشَّمْسُ وَالنَّجْمُ﴾

"It is not for the sun to overtake the moon, does the night outstrip the day? They all float, each in an orbit" (Soorah Ya Seen 36-40).

Arabic linguists interpret the word "Falak" (orbit) as anything in which Allah has mentioned the sun and the moon and the night and day time, but what does the plural "Kullum" (they all) refer us to? Arabic commentators and Muslim scholars say it is not possible for us to say

﴿وَكُلٌّ فِي فَلَكٍ يَسْبِقُونَ﴾

"They all float, each in orbit."

Except that stars are inclusive so that the implication of the plural is not short. Each of us knows the position of modern science that the stars and planets have orbits to which they are attached and will not float except on it.

Expansion of the universe

During the late sixties, Hubble discovered that the universe was expanding and opening out, confirming thereby the statement of Allah, Most High

﴿وَاللَّهُ يَتَبَرَّكُ رَبُّ السَّمَوَاتِ﴾

"With power did We construct the heavens. Verily, We are able to extend the vastness of space thereof" (Soorah Adh-Dhaariyat 51:47).

The perplexed scientist, Einstein, who had proposed the theory of an established universe and compacted it, has previously been able in his observatory to establish this baffling revelation. Had they read the verses of the Qur'an concerning this verse, they would have found that

it leads in part of this disk over the The sun and the moon run on their fixed courses (exactly) calculated with measured stages for each (for reckoning etc)."

Moon for example

Allah, Most High, says:

قَالِقُشْرُحُجِبِي

"The sun and the moon run on their fixed courses (exactly) calculated with measured stages for each (for reckoning etc)."
(Soorah Ar-Rahman 55:5)



This Verse does not indicate the solar and lunar years as it appears to some; rather, it points to a tremendous miracle which has been discovered in science: that both the sun and the moon have fixed size and distance that is accurately established with respect to the Earth. Were the sun to expand its size a bit or come closer to the Earth, we would be set afire, and were it to shrink or move further away from the Earth, then we would freeze. If the moon were to expand a little or come closer, then we on Earth would be crowded dark flooding by the ocean and were it to shrink or move further away, then the ocean would disappear from us.

Does not this indicate an accurate computation?

When we listen to statement of Allah, Most High

قَالِقُشْرُحُجِبِي

"Lord of the heavens and of the Earth and all that is between them, and Lord of every point of the sun's risings"
(Soorah As-Saffat 37:5)

We realize that it talks about the Earth and its rotation, but does not consider the Earth alone. It also talks about the heavens. A star has been recently discovered which revolves about two suns (Alpha Centauri A and Alpha Centauri B). Every day, it has been discovered that there are two suns.



Allah, Most High, says:

قَالِقُشْرُحُجِبِي

قَالِقُشْرُحُجِبِي

And even if we opened to them a gate from the heavens and they

were to continue ascending thereto, they would surely say 'Our eyes have been (as if) dazzled. Nay, we are a people bewitched' (Soorah Al-Hijr 15: 14-15).

This verse discusses three important and amazing passages which require consideration before embarking on space exploration

1. There is a specific window in the atmospheric envelope which serves as a passage way for a space shuttle. This is what is indicated in the Qur'an with the mention of "a gate"

2. The word "Lifay" has two meanings; ascension and curve, and these are two conditions for the escape of a space shuttle from the atmospheric envelope

3. After escaping from the atmospheric envelope, the shuttle encounters pitch darkness as though it has shut its eyes upon itself

﴿شَكَرَتْ أَنْفَرًا﴾

"Our eyes have been (as if) dazzled"

The cleaving of the Moon

﴿تَنَزَّلَتْ لَكُمْنَا رَاقِبًا نَقَرًا﴾

"The hour has drawn near, and the moon has been left asunder"

During a televised interview with the Muslim physicist, professor Zeuglul A. Najjar. The show presenter asked him about the verse

﴿تَنَزَّلَتْ لَكُمْنَا رَاقِبًا نَقَرًا﴾

"The hour has drawn near and the moon has been left asunder"
(Soorah Al-Qamar 54:1)

Does it contain a Qur'anic scientific wonder?

Dr. Zaghloul replied "I have a story concerning this verse, while I was attending a program at a high university in western Britain, the gathering was a mixed one—Muslims and non-Muslims. There was a very lively discussion about scientific wonders of the Noble Qur'an

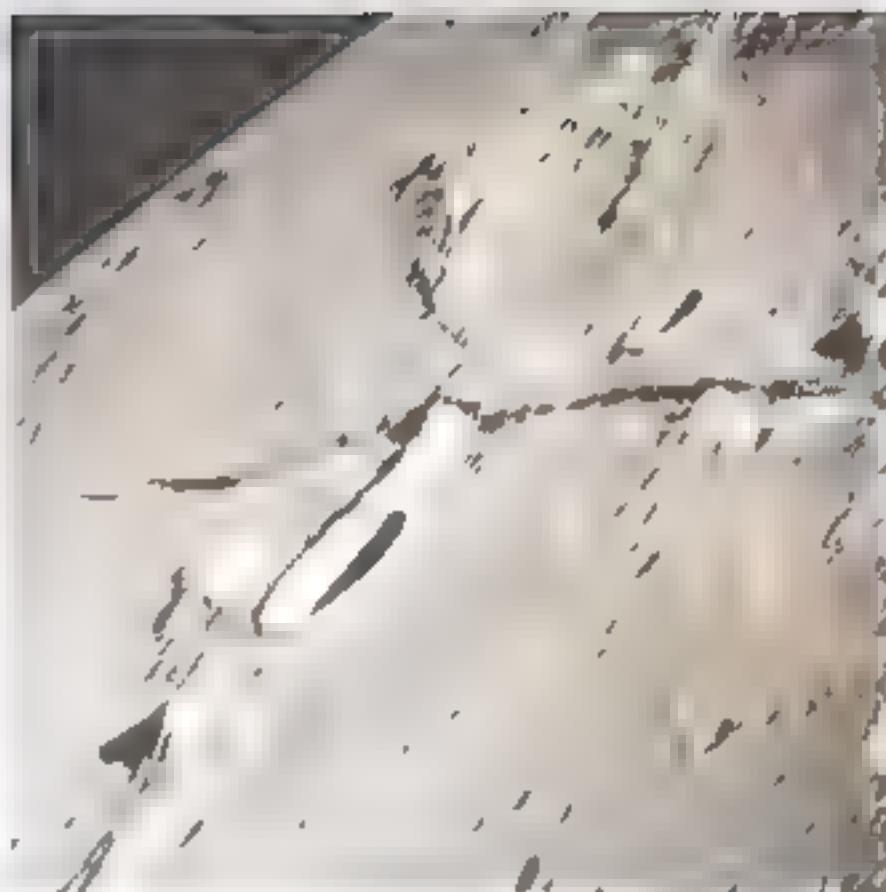


Image published by space agencies of a deep cleft in the surface of the moon

During the discussion, a young Muslim stood up and said "Could you consider the statement of Allah, Most High: 'The hour has drawn near, and the moon has been left asunder' as containing a scientific wonder from the Qur'an?"

"I replied: No, because scientific wonders are explained by science (or explainable by science), but as phenomena, science cannot explain them. A miracle is a phenomenon which is contrary to the laws of nature. The splitting of the moon was a miracle that occurred to the Messenger of Allah, peace and blessings of Allah be upon him, confirming his being a prophet and Messenger. Perceptible miracles are an evidence not only upon those who witness them, but also not been mentioned in the

Book of Allah, Most High, and the *Sunnah* of His Messenger, peace and blessings of Allah be upon him, then it would have been later upon us (present day Muslims) to believe in it, even if it was mentioned in the Book of Allah and the *Sunnah* of His Messenger and because Allah, the Exalted, is able to do anything.

The Prophetic Miracle

Dr. Zaghlool narrated the story of the cleaving of the moon as documented in the books of Prophetic traditions. He said: "In the books of Prophetic tradition it is reported that six years before emigrating from Makkah to Medina, some people of Qur'ash came to the Messenger of Allah, peace and blessings of Allah be upon him, and said: 'O Muhammad, if you are a Prophet and Messenger, bring about a miracle to confirm our Prophethood and messengership.' So he asked them: 'What do you want?' They replied: 'Leave the moon for us, as a miracle and wonder.'"

So the Prophet, peace and blessings of Allah be upon him, stood up supplicating to his Lord for assistance in this situation. His Lord, Blessed is He and Most High, inspired him to point his noble finger to the moon.

So, the moon cleft into two halves, which stayed separated from each other for several consecutive hours, and then fused together. The disbelievers said:

'Muhammad has bewitched us!'

However, some intellectuals (amongst them) said: 'Definitely, magic affects those who are present but does not affect all people. So, they have not been bewitched. Makkah was a place of many travelers. When the first of the travelers arrived, they asked them saying: 'Did you witness anything happen to the moon?' They replied: 'Yes, on so and so night we saw the moon cleft into two halves which stayed away from each other and later re-united.'

Thus some of them believed in Muhammad's Prophethood and his messengership, while some insisted on disbelief. This is why Allah, Blessed is He and Most High, said in His Honored Book:

﴿إِذَا نَزَلَ الْقَمَرُ انشَقَّ ۝ فَذِي بَيْتًا لَهُ تَرْفَعُوا وَيُفْرَأُ
بِهِ تَنْبِيْهُرٌ ۝ وَكَافَرُوا وَكَفَرُوا لِقَوْلِهِمْ وَسَقَطَ آيَةُ رَبِّهِمْ ۝﴾

"The hour has drawn near, and the moon has been cleft asunder (the people of Makkah requested Prophet Muhammad, peace and blessings of Allah be upon him, to show them a miracle, so he showed them the splitting of the moon). And if they see a sign, they turn away, and say 'This continuous magic!' They belied (Verses of Allah - this Qur'an), and followed their own lusts. And every matter will be settled according to the kinds of deeds, for the doer of good deed, his deed will take him to paradise and similarly evil deeds will take their doers to hell)." (Soorah Al-Qamar 54:1-3).

A real story

Dr. Zaghlool said: After I ended my discussion, a young British Muslim stood up and introduced himself, saying: "I am Dawood Muneer Rautakook, head of the Muslim Society of Britain. He said: 'Sir, may I make a contribution?' Zaghlool said: 'Go ahead.' He said: 'I was present at the meeting before he became Muslim. One of the Muslim students presented me a translated copy of the Noble Qur'an. I thanked him and took the book home. When I opened his translation, the first chapter I came across was Soorah Al-Qamar - chapter on the moon: Qur'an 54) and I read:

"The hour has drawn near, and the moon has been left asunder."

I said to myself: Is this a reasonable statement? Is it possible for the moon to shatter asunder and re-fuse together? What power can achieve such? He (the young man) further said: This verse dissuaded me from reading further and I became busy with other matters of care. However, Allah Most High, privileged my sincerity in the search for the truth. So, my Lord ordained that I sit to watch the British television. There was a discussion between the presenter and three notable American space scientists. The presenter was chiding the scientist over spending so much money on space voyages at a time when the Earth was engulged in a myriad of problems: famine, poverty, disease and repression. He was saying: If this money was spent on the inhabitants of the Earth, then it would be more beneficial.

However, the scientists continued to defend their positions and said: This technology has applications in several aspects of life such as in medicine, manufacturing and agriculture. This is not wasted money rather it has assisted us in developing leading edge technologies. During the discussion came the news of the landing on the surface of the moon, the furthest space voyage ever, at terms of expenditure it had cost more than a hundred billion US dollars. The show presenter exclaimed: What sort of madness is this? A hundred billion dollars just to plant an American flag on the surface of the moon. The three scientists said: No, the goal wasn't to plant an American flag on the surface of the moon, rather, we had been studying the internal structure of the moon and we discovered a fact, had we spent much less of that amount to convince the world of our discovery, nobody would have believed us.


The presenter asked them: what was that fact (you discovered)? They replied: The moon once split into two and then re-fused together. The presenter asked: How did you know that? They replied: We found a band of metamorphosed rocks which penetrate the moon from

its surface to its center and then to the opposite surface. We consulted space geologists and they said it is not possible for this to have occurred except the moon had once split asunder and then re-fused together. The young man said: I sprang out of my seat and said: A miracle which occurred to Muhammad over one thousand four hundred years ago! Allah on such a miracle spent more than one hundred billion dollars to prove it for the Muslims? This must be the true religion. He said: So I sat with a copy of the Quran and read Surah Al-Qamar (Quran 54) and this was what led me to accept Islam."

Now the Director of Tokyo observing in Japan accepted Islam

The story of the acceptance of Islam by one of the notable experts in the field of astronomy, Professor Yasuo Y. Karazawa, the director of Tokyo Astronomical observatory in Japan is interesting and inspiring. His observatory is regarded as the second observatory in ranking in the world in terms of its infrastructure and equipment. Allah willed that he would visit Saudi Arabia and there occurred an opportunity for discussion with him at King Abdul Aziz University. A number of specialists in the fields of astronomy and geology were in attendance. Also in attendance were some Muslim scholars such as Az Zindani. After presenting the Quranic concepts on astronomy and facts about the universe to the gathering and having understood them deeply and thoroughly, and after Allah expanded his breast to both he did not hesitate to publish his dated note of affirmation of the truth written in his handwriting. Its translation is as follows:

After a very long time, I discovered that the Quran contains numerous scientific facts. The universe and its contents are thoroughly explained and expounded in the Quran, particularly the subtlest parts of the universe, in such a way that all things are now well-understood. I hereby declare my (acceptance of) Islam.



Time between Science and the Qur'an

During a ring of educational activities of the Jam'iyat ul-Haq Al-Hind, Al-Qur'an Was-Sunnah Society, Scientific

Chair, a symposium was organised on the topic Time between Science and the Qur'an. The speaker was the head of the Society and Professor

University, Aynur-Shah, University

the discussion, Hasabun-Nabryy confirmed that the Noble Qur'an opens up new frontiers of knowledge for contemplation and reflection. Doubtlessly correct, it is a faith (in Allah). It is impossible for scientific facts and the Qur'an to be in conflict. It is either the science is wrong or the exegesis wrong.

First: Two days for the creation of the Earth from an initial muddy state. However, *Genesis* must not be seen

(۱) جائزہ دے کر ہی یہ کہیں گے

"(He) created the Earth in two days." (Soorah Fussilat 41-9).

He also says:

﴿أُولَئِكَ كَانُوا فِي السُّبُوحِ وَالْأَشْرَافِ﴾

وَمِنْهُمْ مَّنْ يَّزِيحُ عَنِ الْمَقَامِ الْمَكِينِ ﴿١٠٠﴾

Have not those who disbelieve known that the heavens and the Earth were joined together as one united piece, then We parted them? And We have made from water every living thing. Will they not then believe? *Saadiyat-Anbiya 2: 10.*

"This is that system that the heavens and the Earth once belonged to a single universe. *Itaqan* [the word for "then"] exploded. *Itatagnahuna*" (then we parted them).

Secondly, no loss for sitting on the heaven in seven heavens in equal layers. Allah says,

﴿لَقَدْ جِئْتُمْ شَيْعَ سَعْدِيَّتٍ فِي يَوْمَيْهِ وَقَوْمِي فِي كَيْفٍ سَعَلُوا أَمْرًا﴾

Then he completed and finished their creation as seven heavens in two days and he made in each heaven its affair (Isaiah Fussilat 4:2)

He (Allah) is referring to the initial smoky (hazy) nature of the heavens.

١٠ ثُمَّ أَسْمَعُ فِي مَسَدٍ وَهِيَ تُعَادُّ لَكَ مَا بِالْأَنْزَارِ نَبِيَّ طَرَفَةٍ ذَا كُرْحًا ذَا شَيْءٍ عَاطِلٍ

Then Heistawak rose over it toward the heavens, when it was smoke and said to it and to the Earth, come both of you willingly or unwillingly. They both said: "We come, willingly." / *Sacred Fictions #1-11*

This was after its explosion in two days, after which the shape of the nucleus began to form. Top left: diffuse; middle: diffuse; bottom:

He fashioned them and invented them as seven heavens in a period spanning another two days.

But did you know that you can help the Earth's ecosystem and making it habitable for man. The Glorified says:

[illegible]

"He placed therein (i.e. the Earth) firm mountains from above it, and He blessed it, and measured there in its sustenance (for its dwellers) in four days equal: i.e. all these four days were equal in length of time for all those who ask (about its creation)." (Georgi Fussilat #3: 0)

3. Ala also referred to the earth mountains which formed the Earth's surface and became cemented in the beginning (of the formation of the universe). Its creation was instantaneous. This is evidenced in the statement of Allah, Most High, "from above it" and "He blessed it," i.e. He made abundant the benefits of the things He made therein such as the water, plants and livestock.

(عَنْ عَبْدِ اللَّهِ بْنِ مَرْثَدَةَ عَنْ عَبْدِ اللَّهِ بْنِ مَرْثَدَةَ عَنْ عَبْدِ اللَّهِ بْنِ مَرْثَدَةَ)

"And brought forth therefrom its water and its pasture" (Sourah An-Naziat 79:31).

"And He measured therein its sustenance for its dwellers). " i.e. He provided for its dwellers their sustenance by creating therein rivers, trees and animals in preparation for the advent of man ". In four days equal (in time) for all those who ask (about its creation)." i.e. in four days without increase nor decrease as information of those who ask amongst mankind.

Dr. Hasabun-Nabhy explained that scientists had achieved - using the radioactive decay of uranium to lead, an estimation of the age of the Earth's rocks and that of subjects - they estimated that the formation of the Earth's crust commenced 4.57 billion years ago and that this is

and the sky by the moon and stars. They have also created sun, moon, and stars, a new galaxy to make the age of about one hundred billions to estimate age on Earth. Then came the Earth began forming 4540 million years ago and man appeared much later after Allah had organized the whole Earth.

﴿ قُلْ أَرَأَيْتُمْ إِنْ دَعَا الْإِنْسَانُ إِلَى عِبَادَتِ اللَّهِ قُلْ إِنَّمَا عِبَادَةُ لِلَّهِ أَحَقُّ أَنْ يُدْعَىٰ بِهِ ۚ إِنَّمَا يَدْعُوا حِمْزُومًا مَّا يُفْتَرُونَ ۚ ﴾

"Has there not been over man a period of time when he was nothing to mention?" (Saarah Insaan 76: 1,

Science has confirmed that man appeared upon the Earth's surface a few tens of thousands of years ago when mankind began to flourish. It is possible to infer the chronological organization of the geology of the Earth commenced with the anchoring of the meteoric mountains on its solid crust, the springing forth of water and air from within the Earth, and the succession of several plant and animal kingdoms until man arrived. This period lasted a stretch of time approximately 4.5 billion years.

The Qur'an (Saarah Insaan 76: 1) points out that this period is equivalent to a day in the universe. Since the geological organization of the Earth beginning with the solidification of its crust, the appearance of man has lasted 1 million years, it is possible to calculate the age of the universe from the perspective of the Qur'an by multiplying the geological period by three (since the creation of the universe according to the Qur'an was in three stages, with each stage being equivalent to two days (relative time). Therefore, the universe is about 13.5 billion years old.

It should not be surprising that science as it today is yet to arrive at the explanation of these six stages of creation of the universe. However, the modern method with estimating the age of universe very resembles to the great explosion known in astronomical physics as the "Big Bang". Scientists have computed the age of the universe using various means and have arrived at several estimates. Some scientists have computed the age of the universe using the expansion of the universe and the rate of increase in redness as 10 to 15 billion years. Others computed it using two different nuclear methods and concluded that the age of the universe is 13 or 15 billion years.

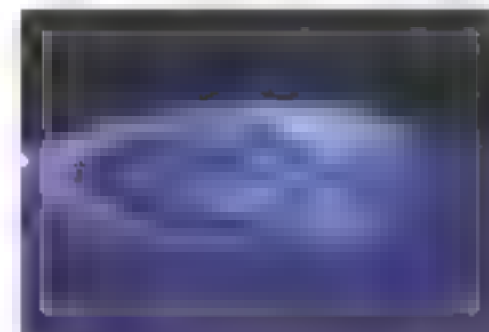
Source: The Muslim Almanac, 1997, p. 100.



Polar flare

With light energy appearing from the middle of the sky in the night, darkness and sparseness due to the luminous light captures any sight. This natural phenomenon usually appears between latitudes 40° north and 40° south.

Among the favors of Allah upon mankind is that, whenever some of these destructive natural radiations approach the surface of the Earth as showers, the stationary elevated objects on Earth work successively to dissipate these charges. Otherwise there would be widespread lightning strikes and fires. In fact, all things on the



The Protector is Allah

The Earth is protected by its magnetic field, which serves to deflect cosmic rays coming from the universe and shields us from tremendous solar outbursts. The Earth's magnetic field deflects and makes electric charges rise and revolve at great heights of up to a thousand kilometers or more in a charged belt known as the van Allen Belt (named after its discoverer in 1958). Had it not been for this protection, which Allah ordained, then such electric charges would have rained incendiary thunderbolts upon us leaving nothing behind on the Earth's surface. See the signs of Allah's Mercy upon us, how He ordained that we be protected. For each of the two (the electric charges and magnetic field) there is an order, and everything before Him (Allah) has a measure. From this we appreciate His words:



﴿لَهُ مُعْضِدٌ مِنْ دُونِهِ﴾ ورسوله يحفظونه من أمر الله ربك الله عز وجل ما يقوم

حقه بتدبيره ما يأمريهم وإذا أراد الله بقوم سوءا فلا مرد له وما لهم من دونه من دال

"For every person there are angels in succession before and behind him. They guard him by the command of Allah. Verily Allah will not change the good condition of a people as long as they do not change their state of goodness themselves by committing sins and by being ungrateful and disobedient to Allah. But when Allah wills a people's punishment, there can be no turning back of it, and they will find besides Him no protector." (Soorah Ar-Ra'd 13:11,



The context of the Verse indicates that the protection is from the most destructive cosmic rays. This is because the verse was revealed in context to what precedes it and what succeeds (in the Qur'an). Read the statement of Allah, Most High:

﴿قُلْ أَلَيْسَ بِرَبِّكُمْ إِلَهٌ فَذَكِّرُوا وَلَهُ السَّمْعُ الْبَاقِلُ﴾

وَوَسَّعَ الرِّجْدَ بِحَمْدِهِ وَالْمَلٰئِكَةُ مِنْ دُفْعِهِ وَرَزَقَهُ الْمَوْجِدَ

مِنْ دُونِهِ وَمِنْ دُونِهِ وَمِنْ دُونِهِ وَمِنْ دُونِهِ وَمِنْ دُونِهِ

"It is He Who shows you the lightning, as a fear (for travelers) and as hope for those who wait for rain. And it is He Who brings up (or originates) the clouds, heavy (with water). And Ar-Ra'd (thunder) glorifies and praises Him, and so do the angels because of His Awe. He sends the thunderbolts and therewith He strikes whom He wills, yet they disbelievers, dispute about Allah. And He is Almighty in strength and severe in punishment." (Soorah Ar-Ra'd 13:12, 13).

The Piercing Star

The Creator swears with a magnificent cosmic phenomenon. He, Glorious is He, and Most High, says

﴿وَاللَّيْلِ وَالنَّجْمِ ۝ وَالشَّارِبِ وَالْطَّارِقِ ۝﴾

"By the heaven and Al-Tariq (the night-come) i.e. the bright star. And what will make you to know what Al-Tariq (night-come) is? (It is) the star of piercing brightness." (Soorah Al-Tariq 86: 1-3)

﴿وَالنَّجْمِ إِذَا هَوَىٰ ۝ مَا تَأْتِي سَاعِدَكَ وَمَا غَشَىٰ ۝﴾

"By the star when it goes down (or vanishes). Your companion (Muhammad) has neither gone astray nor has erred. Nor does he speak of (his own) desire." (Soorah An-Najm 53: 1-3)



﴿وَاللَّيْلِ وَالنَّجْمِ ۝ وَالشَّارِبِ وَالْطَّارِقِ ۝﴾

He, Most High, swears by the heavens and Al-Tariq. Whoever hears this oath on a first occasion wonders who or what Al-Tariq refers to. This is why the High and Powerful (Allah) informed us that it is a piercing star. But how does a star become piercing? Is there a scientific explanation for this?

The scholars of Tafseer have interpreted stellar radiation as being piercing and penetrating but regarding the attribute of Al-Tariq, it has hardly been explored. The second oath has to do with another astronomical phenomenon, the dropping (vanishing) star. It is necessary to differentiate here between this and the phenomenon of meteors, which is considered a daily phenomenon since it occurs frequently. Meteors enter the Earth's atmospheric envelope daily and then burn off when their temperature rises due to friction between them and the atmospheric air. Very few of them fall to the Earth.

Had the Creator willed to swear by the meteor He would have done so. The meteor is mentioned more than once in the Quran.

﴿إِلَّا مَرسلًا فُجِعَ عَنْ يَمِينِهِ رَبِّهِمْ ۝﴾

"Except such as snatch away something by stealing and they are pursued by a flaming fire of piercing brightness." (Soorah As-Saffat 37: 10)

﴿وَلَقَدْ سَأَلْنَا إِلَىٰ رَبِّهِمْ الْفِجْءَ ۝ فَجَاءُوا بِسُورٍ مَّرصُومٍ ۝﴾

"And we have sought to reach the heaven, but found it filled with stern guards and flaming fires." (Soorah Al-Jinn 72: 8)

Allah, Glorified is He, did not swear by the phenomenon of a falling star but swore by the phenomenon of the dropping (vanishing) star. Why?

The mass of neutron stars is roughly 4.1 times the mass of the sun. When a star begins to collapse upon itself it shrinks rapidly and the pressure between atoms increases. The atoms break down to form an electronic fluid that becomes denser (thickens) and becomes unable to bear the pressure due to the weight of the star and its gravitational pull. The result is that the gravity of the star, crushes (breaks down)

the electrons join with protons and fuse to form new neutrons. The star and the star then begin to collapse on the other side the star's weight which smashes everything in front of it. Eventually, the electrons join with protons so that the star becomes a sphere of a pressurized neutron without any space between the densest in the atom. A neutron star measures that is about 10 to 15 miles in diameter. Therefore, scientists call it what is known as a dense neutron star.

A sphere the size of a football, weighing up to 1.4 times the mass of the sun. Were this to be placed upon the Earth or any other celestial body, the surface of the Earth or of that celestial body would not be able to support this tremendous weight and the surface of the Earth or any other celestial body leaving behind it a hole equivalent to its size.

The story of the discovery of pulsars (neutron stars) is an interesting one. In 1967, an American student picked up radio signals from a very distant Earth using a new instrument known as the radio telescope. It is an instrument capable of picking up radio signals from deep space and great distances of up to millions of light years away.

In the early seventies, astronomers were able to observe several stars, all of which showed the quality of emitting uniformly periodic radio signals. Observed in detail, the radio signals came as intermittent signals. Beep Beep Beep... an interval lasted for about a second and repeated itself every second or more.

It is possible to generalize stars that emit these intermittent signals as pulsar stars. In Arabic, the star At-Tariq (the night-comer), also Tazir, the piercer. It is one of the signs of Allah which He, Glorified is He, swore by.

﴿وَاللَّيْلِ إِذَا يَغْشَىٰ﴾ ﴿وَالنَّجْمِ إِذَا هَوَىٰ﴾ ﴿وَالنَّارِ إِذَا تَلَوَّىٰ﴾ ﴿وَالنَّارِ إِذَا تَلَوَّىٰ﴾ ﴿وَالنَّارِ إِذَا تَلَوَّىٰ﴾

"By the heaven, and At-Tariq (the night-comer, the bright star), and what will make you to know what At-Tariq is? (It is) the star of piercing brightness." (Soorah At-Tariq 86: 1-3)

At-Tariq is a celestial body with two characteristics. It is a star and it is piercing. Were these qualities used on any other celestial bodies, it would be observed that pulsars (neutron stars) are the only celestial bodies

star, night-comer and piercing. It has regular pulses and taps. The Tariq emanates regular intermittent taps (tick, tick, tick), which is very similar to the beeps, which the radio signals have captured emanating from the pulsors (neutron stars). Astronomers have concluded that a star emits very fast pulses due to the speed of its rotation and the speed of its energy. Also, an old pulsar has a very low frequency signal (it emits signals in a long period of time). This happens when its energy wanes and its speed of rotation diminishes.

Glorified is Allah who characterized this star with tremendous density and swore by it. The significance of an oath informs us of the significance of the object of the oath. The density of a pulsar is the highest density known (to man) and its weight is greater than that of the Earth.

despite its (relatively small) size. Now, let us picture what would happen to the Earth or to any celestial body were this star (pulsar) to be placed upon it or were it to collide with it. No celestial body can withstand a collision with it, not even the sun; the reason being its dreadful density. Astronomers have estimated the number of pulsars in our galaxy at about one hundred thousand. Naturally, it would be expected that the other billions of galaxies would also contain hundreds of thousands of pulsars.

So if the heavens are filled with pulsars, therefore, Allah, Glorified is He, employs this oath by way of emphasis.

﴿وَاللَّيْلِ إِذَا يَغْشَىٰ﴾ ﴿وَالنَّجْمِ إِذَا هَوَىٰ﴾ ﴿وَالنَّارِ إِذَا تَلَوَّىٰ﴾ ﴿وَالنَّارِ إِذَا تَلَوَّىٰ﴾ ﴿وَالنَّارِ إِذَا تَلَوَّىٰ﴾

"There is no human being but has a protector over him (or her) (i.e. angels in charge of each human being guarding him, writing his



An illustration of a pulsar, a small, dense star that emits the most powerful pulses of light and radio waves in the universe.

good and bad deeds, etc).” (Soorah Ar Tariq 86:4)

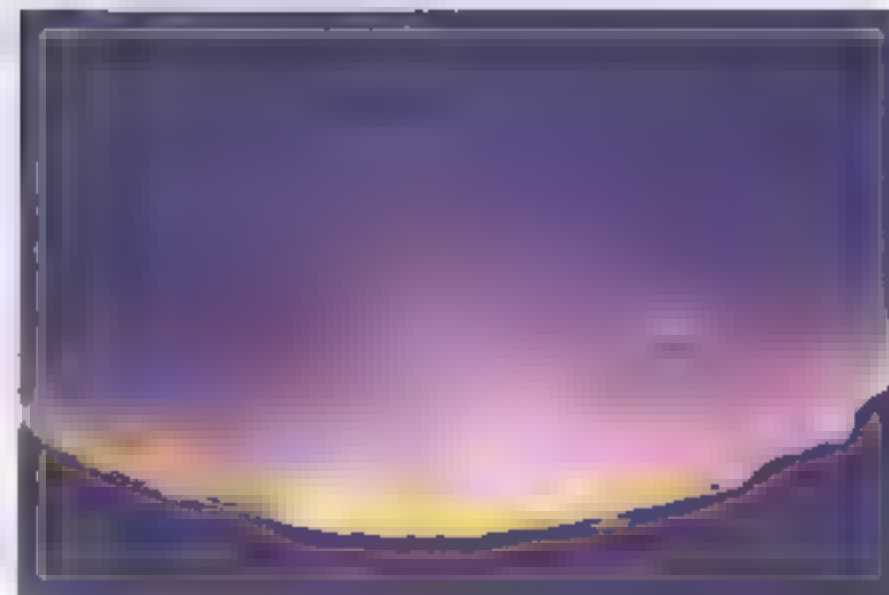
Thus, the affairs of every soul are entrusted to a protector who watches and is in charge and protects it

Furthermore Allah there is a similarity between the protector and the Lord of Sirius. He created a new and new image of Qur’anic matter, describing the pulsar as a celestial phenomenon. In such detail, employing such few words as can be crammed on the fingers of a hand (in a right corner perhaps) and no basic astronomical explanation the reason of the universe. If man however is incapable of knowing, he would attempt a definition or description of a pulsar, he would require lines (of writing) and several sheets to describe it

After Allah our Protector, I am pleased to inform us about and sworn by this star pulsar. He informs in the matter of the soul of mankind and reminds us the protector watches and is in charge and protects it. Ever watch over each soul to enunciate what is in its favor and that against it (i.e. is good and bad deeds), even its (soul’s) palpitations

What similarity between the watcher protector who enunciates everything, small or big, in extreme detail and a person whose details (inverse the brevity of the new system) is a vast and extreme detail. And he All-Protector (Ever watchful) Allah upon whom none of the secrets of man’s soul is hidden, claimed by a word and the connection of and power (relaxation) from what they utter and unto them. Peace be upon the Messengers and all we praise and thanks be to Allah and for the Worlds (mankind, jinn and all that exist)

Ar-Rahman Ar-Rahim The Most Gracious The Most Merciful



The Lord of Sirius

When we observe the Sirius which has a right ascension, a star about fifty trillion (50,000,000,000,000) miles away from us, we see it as it was nine years ago. This is because its light travels at a speed that enables us to see about eight years. If we assume there was some intelligent form close to the Sirius which has a right ascension observing our sun, it would see it as one of many tiny luminous and brilliant spots, just as any star. When astronomers look through their telescopes, which send them information from vast distances, they are observing events of billions of light years away. For each of the luminous radiations which reach their instruments, there is an age which it indicates. It is possible for it to have originated a thousand years or more or less ago.

Therefore, astronomical observations are observations of the past and not of the present. From this, the theory of Relativity is established. This theory has been projected to several areas and states: Everything

in motion and it carries its age with it and time is linked with everything in motion and it has its time of association). The rocket is faster than a plane and the plane is faster than a train and so on.

How then do we understand the phenomena out there when stars could be as far as millions of billions of light miles away? It truly is a wonder that the heavens (space) transmit information regarding us without intelligent life on it.

The atoms themselves transmit its messages and communicate to us what occurs on it due to the influences of pressure or temperature or movement. Whenever, the atoms react to influencing (factors) its electrons vibrate in every direction of the universe. Thus the heavens speak (transmit information about itself) saying that there is a Tremendous Power in this expansive universe.

Definitely, we have taken from it a part and several others remain which we are yet to discover from our research. This is from Allah's creation, from His Mercy and Power, which are infinite. Allah - the most High - says:

وَلَوْ أَنَّ شَجَرَاتُ الْجِبَالِ قَلَمٌ وَالْبَحْرُ حِبٌّ مِمَّا يَكْتُبُ
سُحُفَ الْقُرْآنِ مُضَاعَفٌ لَكُنَّ مِنَ الْغَبْرِ كَلِيبٌ ۚ (Al-Ankabut: 16)

"And if all the trees on the Earth were pens and the sea (were ink wherewith to write), with seven seas behind it to add to its (supply),



﴿قُلْ أَتَعْلَمُونَ﴾

yet the Words of Allah would not be exhausted. Verily, Allah is Almighty, All-Wise." (Soprah Luqman 31:27)

For every piece of information there is a specific wave (with its own amplitude, phase and frequency). Whenever atoms respond to influences, they vibrate at specific frequency/amplitude and emit electromagnetic waves from its inner shells in all directions in space. The waves travel in space at the speed of light. It is within our capacity to translate these electromagnetic waves into a language we can comprehend just as light radiation detectors have been able to. And Allah says:

﴿أَفَأَنْتُمْ تُبْصِرُونَ﴾

"Say: Are those who know equal to those who know not?" (Soprah Az-Zumar 39:9).

So, what is more marvelous than the universe in which we live? The Qur'an points to these phenomena in more than one Verse, some of which have been mentioned above.

in Modern Subsequent

We observe that the mention of the East and West here is closely related to the mention of Allah's name. Most of the attributes of Allah are praise and blessing, it is upon Him that we rely for our sustenance and our life is a complete devotion to Him. So, it is appropriate to mention His name in the context of the East and West, which are the two opposite directions of the earth, and the two opposite directions of the universe. The Beneficent Allah has a name for every thing; this is emphasized in the second part of the context:

﴿لَا إِلَهَ إِلَّا هُوَ يُحْيِي وَيُمِيتُ﴾

"La ilaha illa Huwa (none has the right to be worshipped but He) so take Him Alone as Wakil (Disposer of your affairs)" (Soorah Al-Muzzammil 73-9)

In this sort of instance where Allah is emphasizing that He is Lord of the universe and everything in His worship, it is more appropriate to find that the singular context is most appropriate. The mention of the East and West in singular context perfectly fits the singular atmosphere which we experience from this Noble Verse. However, in the second Verse, the context differs, let us look at some of the verses Allah Most High says:

﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾
 ﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾
 ﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾
 ﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾

"He created man (Adam) from sounding clay like the clay of pottery. And the jinn did He create from a smokeless flame of fire. Then which of the Blessings of your Lord will you both (Jinns, and men) deny? (He is the Lord of the two Easts (places of sunrise during early summer and early winter) and Lord of the two Wests (places of sunset during early summer and early winter). Then which of the Blessings of your Lord will you both (Jinns and men) deny? He has let loose the two seas (the salt water and the sweat) meeting together. Between them is a barrier which none of them can transgress. Then which of the Blessings of your Lord will you both (Jinns and men) deny? Out of them both come out pearl and coral. Then which of the Blessings of

your Lord will you both (Jinns and men) deny?" (Soorah Ar-Rahman 55-61)

The discourse in these Verses comes in the contexts of duals. The Beneficent Allah informs us that He is the Lord of the two Easts and the two Wests, that He is the Lord of the two Easts and the two Wests, that He is the One Who let loose the two seas (salt and fresh water seas) to meet but without transgressing, and out of them both come pearls and corals. Thus the dominant context is the dual context and hence it is most appropriate that the East and the West should also be mentioned in duals.

In the third example, if we wrote the third Verse along with its preceding verses and its succeeding verses, we understand the reason for mentioning the East and West in a plural context. Allah says:

﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾
 ﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾
 ﴿يَوْمَ نَخْلَعُ السَّيِّئِينَ فِي أَرْضٍ رَافِيَةٍ ۚ﴾

"So what is the matter with those who disbelieve that they hasten to listen from you (O Muhammad) in order to belie you and to mock at you, and at Allah's Book (the Qur'an) (sitting) in groups on the right and on the left (of you, O Muhammad)? Does every man of them hope to enter the Paradise of delight? No, that is not like that? Verily, We have created them out of that which they know! So I swear by the Lord of all (the three hundred and sixty) points of sunrise and sunset in the East and the West that surely, We are Able To replace them by others, better than them, and We are not to be outrun." (Soorah Al-Ma'arij 70:36-41).

The discourse here (as the reader would observe) has to do with the disbelievers; therefore several easts and wests were mentioned in such a way that the contextual rhythm is plural and the context preserves the character we have observed with the two previous Verses.

From another viewpoint, the Most High, Most Powerful (Allah) calls us to contemplate profoundly the meanings of the eastern contexts. The intent with mentioning the East and West in the plural context could be to call the attention of new disbelievers from new

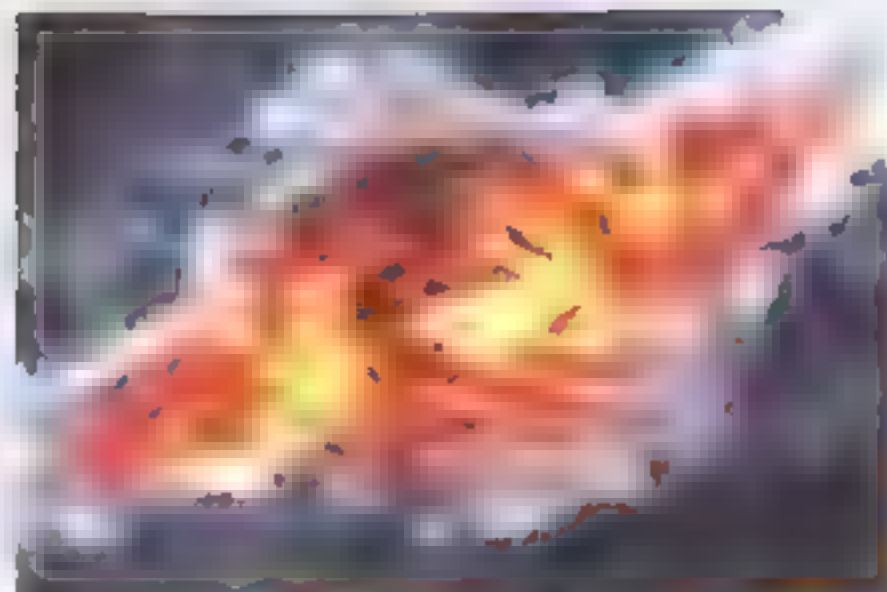
is addressing them saying:

﴿لَا تَقْرَأُ مِنْ كِتَابِ الْغُيُوبِ﴾

"So I swear by the Lord of all (the three hundred and sixty) points of sunrise and sunset in the East and the West that surely 'We are Able' "
(Al-Ma'ari) 70-40.

This (East and West) which We have informed you of and made you see in all places in Earth. We are certainly able to replace him by one even better than them and we are not over-awed by anyone. As for this congruence, which we have shown in the three sets of Verses mentioned above, is a strong example of Qur'anic eloquence and its beautiful linguistic style. As for what has been said that the mention of the East and West in singular and plural contexts impels seekers to research and contemplate and makes deep and profound thoughts. Certainly critical meanings, change of words, express verse and even contexts of sagacity emanate with such ease as has except from the Almighty the West. As for the word used to contemplate one from the meaning of "Lord of the East and the West" we would find in this expression this new viewpoint that was previously unknown, a main determinant the rising and setting of the sun at every moment upon different horizons and the support he actually was some help attributed for human imagination.

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Ascension and the Darkness of the universe

Abstract

In our last examination of the statement of Allah, Most High:

﴿ وَلَوْ فَتَحْنَا عَلَيْهِم بَابًا مِنْ السَّمَاءِ فَظَلُّوا فِيهِ جُثَّةً ﴾ ٥

لَعَلَّوْا بِمَا شَكَرْتُمْ أَنْصَرُوا إِلَىٰ عَزْمِ قَوْمِ الْمُشْكُوتِ ﴿٤٠﴾

"And even if We opened to them a gate from the heavens and they were to continue ascending there to: they would surely say: 'Our eyes have been (as if) dazzled. Nay, we are a people bewitched.'" (Sūrah Al-Hijr 15: 14-15).

We come across another scientific wonder in this Verse, and that is in His (Exalted is He) statement:

﴿ قَالُوا إِنَّا بُدِّلْنَا عَيْنًا ﴾

"They would surely say 'Our eyes have been (as if) dazzled!'"

This is from the fact that the eyes have been dazzled and the darkness of the expansive cosmos has been confirmed. Was confusion, no space, darkness prevails to the eye. The darkness has been confirmed by science in great detail. The explanation for it is: if we were to compare the thickness of daytime stratum (the atmosphere) and a two hundred kilometers to the distance between the Earth and the sun (a distance of one hundred and fifty million kilometers), the fraction is approximately 1/750,000. If we compare this fraction to the radius of the known universe, it becomes obvious that it is insignificant. Thus the magnificent parable of the Qur'an becomes clear regarding Allah's Words

﴿ وَلَآ إِلَهَ إِلَّا اللَّهُ مَلِئَ سُبُحَ الْبَهِارِ إِذَا هُمْ يَنْظُرُونَ ﴾

"And a sign for them is the night, We withdraw therefrom the day, and behold, they are in darkness." (Soorah Ya Seen 36-37).

When He compares the removal of the extremely thin daytime stratum with the removal of the skin of a slaughtered animal from its whole body, a matter which affirms that darkness is the norm in the universe and day/light is but a thin negative phenomenon, which only becomes visible in half of the Earth's atmospheric envelope which faces the sun as the Earth, rotates about itself. As a result of this rotation, first it is gradually bared from the intense darkness of each night and the heavens, just as the skin is gradually bared from a slaughtered animal.

Also, affirming the perpetual darkness of the space is what the Qur'an confirms at another place, and that is Allah's Words

﴿ أَمْ أَعْزَبَ عَلَيْكَ الْغَافِقُونَ ﴾

"Are you more difficult to create, or is the heaven that He constructed? He raised its heights and He has equally ordered it. Its night covers with darkness and its forenoon He brings out (with light)." (Soorah

An-Muhyid 79:27-29)

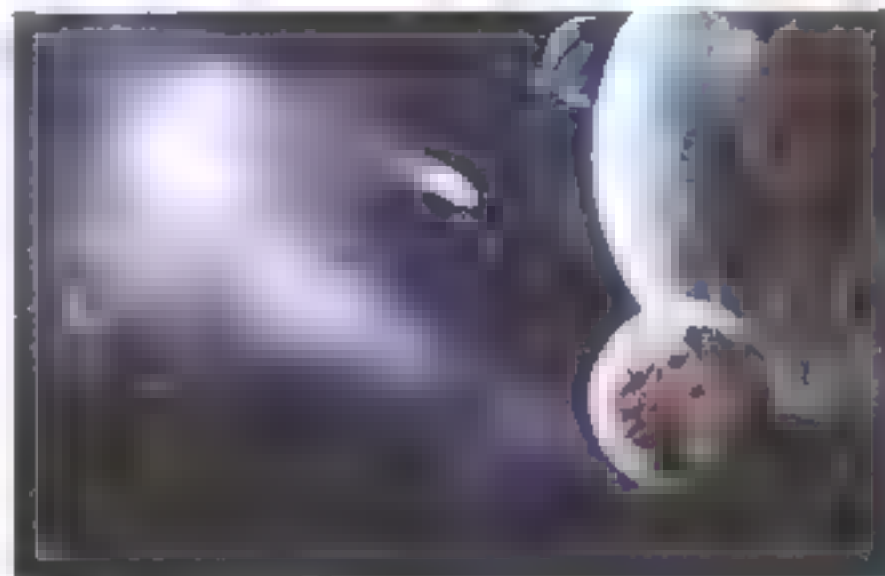
The pronoun in His saying, ﴿ لَيْلٌ قَوِيَّةٌ ﴾ "its night covers with darkness" refers to space. The meaning of this is that Allah, Most High, made the night of space perpetually of intense gloomy darkness, whether it merges with the darkness of the night or it separates there due to the thin daytime stratum (of the atmosphere) which the light of day engulfs. Our Lord, Glorified is He, describes it in His Words, ﴿ لَيْلٌ قَوِيَّةٌ ﴾ "His forenoon He brings out (with light)," i.e. He made manifest the light of the sun so that it may be perceived from places on Earth as light and heat in the Earth's daytime.

This is confirmed by the oath of Allah by daytime, that when He manifests the sun, i.e., He unveils it and makes it bright. So, He says

﴿ وَنَحْنُ وَجْهٌ وَالْقَمَرُ رَاسِي وَاللَّهُ يَوْمَ يُلْقِي أَكْبَارُ يَعْلَمُ ﴾

"And by the sun and its brightness. And by the moon as it follows it (the sun), and by the day as it shows up (the sun's) brightness; and by the night as it conceals it (the sun)." (Soorah Ash-Shams 91: 1-4)

That is, it is the daytime which makes the sun visible and bright to whoever views it from the Earth. This is another of the scientific





wonders of the Qur'an confirming that the radiation of the sun is not seen except as light during daytime and that the universe beyond the earth is pitch darkness and that the daytime stratification must have characteristics which enable in the manifestation and brightening of the sun's light to support life on Earth.

These are some of the scientific wonders, which these two Noble verses contain. Obviously, there are scientific wonders in these verses and others which science is yet to discover. All these affirm and confirm the miraculous nature of the Qur'an.

﴿وَلَقَدْ نَزَّلْنَاهُ بِقَوْلٍ مِّمَّنْ يَقُولُ﴾

"And truly, this (the Qur'an) is a revelation from the Lord of the Alameen (mankind, Jinns and all that exists)." (Soorah Ash-Shu'ara 20: 192).

And that:

﴿لَا يَأْتِيهِ الْبَاطِلُ مِنْ بَيْنِ يَدَيْهِ وَلَا مِنْ خَلْفِهِ﴾

﴿لَا يَأْتِيهِ الْبَاطِلُ مِنْ بَيْنِ يَدَيْهِ وَلَا مِنْ خَلْفِهِ﴾

"Falsehood cannot come to it from before it or behind it (it is sent down by the All-Wise, Worthy of all Praise, Allah)." (Soorah Fussilat 41: 42).

And it is the perpetual miracle that Allah inherits the Earth and all that is upon it.

As for the entering of space, it is not possible except through an open door (window). The motion of any celestial body occurs in winding (curved elliptical or helical) paths, which are not straight. This is what the Qur'an describes as 'Unad' continuous accession.

These are some of the scientific wonders occurring in the statements of Allah, Most High.

﴿وَلَوْ أَنَّ لِلَّذِينَ كَفَرُوا مِنْ الْفِتْرِ لَكُفُّوا بِهِمْ مِثْرَ حَبِّ شَعِيرٍ﴾

﴿وَلَوْ أَنَّ لِلَّذِينَ كَفَرُوا مِنْ الْفِتْرِ لَكُفُّوا بِهِمْ مِثْرَ حَبِّ شَعِيرٍ﴾

"And even if We opened to them a gate of the heavens and they were to continue ascending thereto, they would surely say 'Our eyes have been (as if) dazzled. Nay, we are a people bewitched'" (Soorah Al-Hijr 15: 14-15).

Another aspect of the scientific wonders in this Verse is regarding His saving.

﴿يَعْلَمُونَ أَنَّ شَرَّكَاءَ اللَّهِ لَا شَرَّكَاءَ لَهُ﴾

"They would surely say 'Our eyes have been (as if) dazzled. Nay, we are a people bewitched'."

The meaning of the Verse is: Were a gate of the heavens to be opened to these rejecters of the Creator, they would say: Definitely, our eyes are dazzled and covered. They are not able to see anything, and at this point – in this situation – man can see nothing but darkness.

Thus Qur'anic parable describes a fact about the universe which modern science only recently acknowledged. This was unknown to man. After man gained ability to go to space, it became apparent that

It is very easy to know it much prior to the point of darkness and in the daytime too. In the night the darkness is bright. The sun is no thicker than two hands. If a cylinder is measured from the sea level to the moon rises above it, he sees the sun as a flat disk on a pitch-black surface.

Since the portion where the daytime shines upon the Earth is indeed its length, breadth and thickness, and the motion/rotation is continuous and persistent, and the distance between the sun and the Earth is about one hundred and fifty million kilometers, and the radius of the known universe is about twelve billion light years, then we understand how insignificant the thickness of the daytime stratum is and its non-constancy due to its transfer from one point to another. It also becomes clear to us that this daytime stratum veils from us the darkness of the universe beyond the Earth while we experience bright daytime. Once night comes, the day departs and the darkness of our earthly night merges with the darkness of the universe. That daytime stratum moves to the other half of the Earth to separate it from the overwhelming darkness (of the universe).

The brightening of daytime is the lower stratum layer of our Earth's envelope. The pleasant white color in which we see it during day is a tremendous blessing from amongst the blessings of Allah upon His creatures. The reason for this is that the air in this layer of the atmosphere has the greatest density (relatively) and as we rise the density diminishes until it is virtually nonexistent. This layer is saturated with water vapor and dust particles, which the winds pick from the surface of the Earth and suspend in the air. Each part of the dense air, the water vapor and dust particles scatter and reflect the rays of the sun so that it appears white during daytime as a light phenomenon limited to the lower portion of the atmospheric envelope of the half of the Earth facing the sun.

After exceeding the two-hundred-kilometer mark above sea level, air becomes rarified due to its sparseness of concentration and low content with height. And due to the sparseness of both water vapor and dust particles, not to mention relative to the height, it almost becomes nonexistent. The sun and other stars appear as or faint blue points in an engulfing pitch-dark ocean (or space) because their radiations find

nothing to scatter or reflect them in the expanse of the universe.

Confucius said: "One of the heavens and the Earth who has learned us of this fact prior to its discovery by science. By comparing one ascending into the heavens with one whose eyes are (as if) dazzled such that it seems nothing but complete pitch-darkness, or with someone whose sight is affected by magic and can hardly see anything going on around him, both of them sides on detailed expressions, showed the earliest explorers of space experienced upon going beyond the daytime stratum and entering into the darkness of the universe. They narrated their experience in a manner that was similar to what was expressed by the Verse of the Qur'an without previously being aware of it (the Verses).

﴿إِنَّا شَكَّرْنَا لِقَمَرًا﴾

"Our eyes have been (as if) dazzled."

Allah says:

﴿سَنُرِيهِمْ آيَاتِنَا فِي الْآفَاقِ وَفِي أَنْفُسِهِمْ عَلَىٰ بَيِّنَاتٍ لَّعَلَّهُمْ تَذَكَّرُوا﴾

"We will show them our Signs in the universe and in their own selves, until it becomes manifest to them that this (the Qur'an) is the Truth. (Soorah Fussilat 41: 53).

Therefore the space is not just an empty place as previously assumed but rather a boundary into which entry is impossible except from an open gate. Let us examine the statement in Noble Verse

﴿فَنظَرُوا إِلَىٰ بَيِّنَاتٍ﴾

"And they were to continue ascending there to."

The word *Al-Uhoj* (interpreted in the Verse as "continue ascending there") linguistically means the motion of a body in a curved, winding path. Extensive studies have proved that the motion of bodies in the universe can never be in a straight path necessarily. It may be curved and winding due to the dispersion (spreading) of matter and energy in the whole universe, thus any material body, regardless of the

magnitude or minuteness of its mass, cannot but move in a curved path.

It has become confirmed in science that a moving celestial body in space, regardless of its mass, has a trajectory, and therefore, it is not affected by it. This is what the Noble Qur'an referred to as *Al-Urooq*. Had it not been for the understanding of the escape velocity, rather of reaching into space, it would not have been possible for man to launch artificial satellites into space nor venture into space.

The explanation for this is that for any object launched into the skies it must necessarily travel in a curved path. This is due to the combination effect of the force of gravity and the horizontal propulsion. The magnitudes of these two forces depend upon the mass of the object in motion. When these two opposing forces are in a balance, the object begins to revolve in an orbit about the Earth, propelled at a horizontal speed known as angular velocity.

This is a delicate measure which the Creator (Glorified is He, between the force of gravity and the force of propulsion resulting from the cleaving of the heavens and the Earth) is what determined the orbit in which each celestial body moves and the speeds at which each celestial body moves in its orbit while rotating on its axis.

Since the gravitational pull of the Earth diminishes with increase in altitude above the Earth, the speed of an object ascending into space changes with a change in its altitude. By knowing precisely the relationship between the gravitational pull of the Earth and the speed of an object being launched into space, it is possible to compute precisely the height to which the object will orbit the Earth or a wider celestial body in the Solar System or even beyond the Solar System such that it enters into the sphere of influence of a larger body and revolves around it.

The least speed required to overcome the gravitational pull of the Earth for an object launched from its surface into space is known as the escape velocity. It has a known computation.

The Noble Qur'an has described the ascension of objects into space at places other than the one we are examining. He says:

﴿مَنْ يَعْلَمُ مَا يَتَّبِعُ فِي الْأَرْضِ وَمَا يَخْرُجُ مِنْ بَيْنِ يَدَيْهِ وَمَا يَنْزِلُ فِي السَّمَاءِ﴾

"He knows that which goes into the Earth and that which comes forth from it and that which descends from the heavens and that which ascends to it." (Soorah Sab' 34:2)

﴿يُنْزِلُ الْأَمْثَارَ مِنْ سَمَاءٍ رِجْوَاهُ أَنْ تَخْرِجَ بِهِ مِنْهُ طَائِفًا مِمَّنْ يَنْقُصُ﴾

"He arranges (every affair from the heavens to the Earth, then a (affair) will go up to Him. In one day, the space whereof is a thousand years of your reckoning (i.e. reckoning of our present world's time)." Soorah As-Sajdah 32:5).

﴿وَلَوْ لَا أَنْ يَكُونَ النَّاسُ أُمَّةً وَاحِدَةً لَفَعَلْنَا لَبِئْسَ مَا يَكْتُمُونَ﴾

﴿لِيُنْذِرَ مَنِ اتَّبَعَ وَيُذَكِّرَ الَّذِينَ لَا يَذْكُرُونَ﴾

"And were it not that all mankind would have become one Community (all disbelievers, desiring worldly life only), We would have provided for those who disbelieve in the Most Gracious (Allah), silver roofs for their houses, and elevators and stair ways, etc of silver where by the ascend." Al-Zukhruf 43:13.

﴿فَرِحَ الْمَلَائِكَةُ وَرُوحُ إِلَهِهِ فِي يَوْمٍ كَانَ مِثْلَهُ مِائَةِ أَلْفٍ سَنَةٍ مِّنَ الدُّنْيَا﴾

"The angels and Rosh (Jibreel) ascend to Him in a day the measure whereof is fifty thousand years." (Soorah Al-Ma'arij 70:4).

So, praise be to Him in whose Hand is the dominion of all things. Allah says in His Book:

﴿مَنْ يَرْجُو فَكُلْ مِن رِّزْقِ رَبِّكَ﴾

"(He) Who made everything He has created good." (Soorah As-Sajdah 32:7).

Praise is to Allah, Lord of the Worlds.

So, we say the Noble Qur'an contains several facts which modern science has established and continues to establish every other day. Amongst that is what occurs in the statement of Allah, the Exalted:

﴿وَوَيْلٌ لِلنَّاصِرِينَ الَّذِينَ كَانُوا يَقُولُونَ نَحْنُ رَبُّنَا وَإِنَّا بِمَا يَصْرِفُونَ شَاكِرُونَ﴾
 ﴿قَالُوا إِنَّا شَهِدْنَا لَأَنَّهُنَّ كَذِبَةٌ لَّغَوِيَّةٍ جَوْثٍ﴾

And even if We opened to them a gate of the heavens and they were to continue ascending thereto, they would surely say 'Our eyes have been as if dazzled. Nay we are a people bewitched.' (Soorah Al-Hijr 15: 14-15).

The two Noble Verses occur in the context of a discussion about the obstinate and haughty ways of the disbelievers of Quraysh toward the Messenger of Allah, peace and blessings of Allah be upon him, and their believing what he brought of clear proofs and guidance. These two Verses (with a host of other examples) of the haughtiness and obstinacy of the people of Qaysar toward the truth even if Allah, Most High, were to open for them a gate of the heavens and enable them to keep ascending thereto with their backs so that they may observe the amazing creation of Allah, and appreciate the Magnificence of His Power to originate creation, they would still doubt, not accept and would keep overrating and intoning. They would also accuse themselves of complete incapacitation of sight and would insist on that they were in a state of bewitchment. All these are attempts to dodge the truth due to the fact that they have extreme hatred for the truth and are an obstinate people. Our purpose here is not to detail the position of the haughty and idolatrous amongst the Quraysh or others, as that is not what we intend as to comprehend some of the scientific wonders of these two noble Verses as the opportunity permits.

The first point of scientific wonder in these Verses is Allah's statement regarding the universe: "Science has established categorically that space is not empty as man was used to assuming not long ago. Rather, it is a structured construction into which entry is impossible except through an open gate."

Until recent years, it was not known to anyone that space—despite its expense—was not empty, but is filled with matter of extremely dense concentration in the form of rarefied gases, the major gases being hydrogen and helium, and minute concentrations of oxygen, nitrogen, water vapor and neon. All these, along with enormous amounts of

different radiations form the universe. The principal reason for the previous assumption that space was empty was due to the gradual decrease in pressure in the atmospheric envelope of the Earth with increase in altitude about its surface until it becomes practically imperceptible beyond a thousand kilometers above sea level.

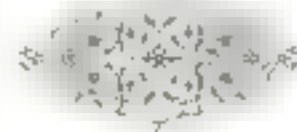
As mentioned earlier, science has eventually confirmed that space is a structured building—construction—filled with matter and energy and is not penetrable except via the path of an open gate. This is what the Qur'an has mentioned in this Verse we are examining and in other Verses. This is testimony to the truth that the Qur'an is a revelation from the Lord of the entire creation and all that is in the universe.

﴿مَنْعَ الْكَافِرِينَ لَئِنْ كُلُّ شَيْءٍ بِلَدِّهِمْ بِمَا تَكْفُرُونَ﴾

"... The Work of Allah Who perfected all things. Verily! He is well-acquainted with what you do." (Soorah An-Naml 27:88)

This Verse contains examples of scientific wonders other than that which we mentioned. We shall soon examine them in due course in our subsequent essays. We beseech Allah for guidance. He is the Patron Lord, what an excellent Patron Lord and what an excellent Helper! And the last of our supplication is Praise be to Allah the Lord of the Worlds.

Translated by: Dr. Muhammad Ali Hashim, Ph.D.



The Atmospheric pressure

The marvelous verse

Allah, the Mighty and Sublime, says:

﴿مَنْ يُرِدْ اللَّهُ أَنْ يَهْدِيَهُ يَشْرَحْ صَدْرَهُ لِلْإِسْلَامِ وَمَنْ يُرِدْ أَنْ يُضِلَّهُ يَجْعَلْ صَدْرَهُ ضَيِّقًا حَرِّيقًا ۖ عَلَيْنَا يَتَّبِعُ الْكَتْمَةُ﴾

"And whomsoever Allah wills to guide, he opens his breast to Islam and whomsoever He wills to send astray, He makes his breast closed and constricted, as if he is climbing up to the sky" (Soorah Al-An'am 6: 125)

Linguistic Explanation

Al-Faraj: *Al-Mutaharrir*; the one who refrains from sin.

ضيق - the greatest constriction. Ibn Altheer said: *ضيق* - a basic narrowness.

Raqibun Harajun: A parochial man.

Harajun Subulun: His mind is narrow and not open to goodness.

Scientific facts

As one ascends the sky, atmospheric pressure decreases and so does the amount of oxygen. This results in a constriction of the lungs and difficulty in breathing.

Scientific explanation

Allah, the Mighty and Sublime, says in His Book

﴿مَنْ يُرِدْ اللَّهُ أَنْ يَهْدِيَهُ يَشْرَحْ صَدْرَهُ لِلْإِسْلَامِ وَمَنْ يُرِدْ أَنْ يُضِلَّهُ يَجْعَلْ صَدْرَهُ ضَيِّقًا حَرِّيقًا ۖ عَلَيْنَا يَتَّبِعُ الْكَتْمَةُ﴾

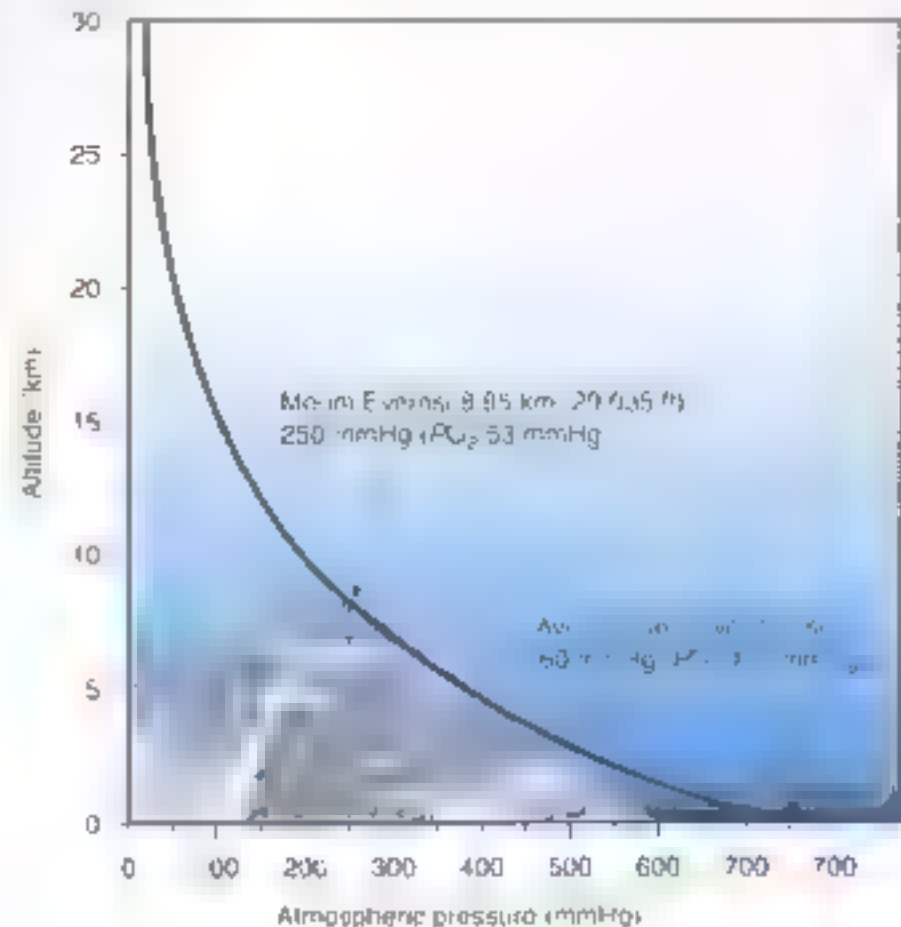
"And whomsoever Allah wills to guide, he opens his breast to Islam

and whomsoever He wills to send astray, He makes his breast closed and constricted, as if he is climbing up to the sky" (Soorah Al-An'am 6: 125).

This is a clear Verse that points explicitly to two facts now confirmed by science.

First: A tremendous change occurs in atmospheric pressure with ascent into the sky resulting in a constriction in the lungs and a difficulty in breathing.

Second: Each time one goes higher in the sky, the atmospheric pressure and the quantity of available oxygen reduce, which lead to constriction in the lungs and difficulty in breathing.



in low pressure. It is observed that atmospheric pressure decreases with altitude above sea level.

The *World Encyclopedia* states that most of the mass of the atmosphere is not evenly distributed in a vertical direction so that only percent of the mass of the atmosphere accumulates between the surface and twenty thousand feet above sea level.

A scientist reports that he has found the density of the atmosphere above sea level. Therefore the density of the atmosphere decreases rapidly as we ascend in a vertical direction such that at very high altitudes, the density becomes extremely low.



The *World Encyclopedia* states that all forms of life require oxygen with the exception of simple water living organisms. Man as an example cannot do without breathing oxygen to remain alive and maintain a particular amount of pressure within his lungs. The presence of man at altitudes less than twenty thousand feet poses no serious breathing problem. In reaching heights between twenty and twenty-five thousand feet, breathing is possible due to the fact that man's respiratory organs are able to adapt, even with great distress and difficulty. However, beyond this, man is unable to breathe at all resulting usually in death

due to lack of oxygen.

The *American Encyclopedia* says: "It is necessary for an airplane at very high altitudes to maintain a specific internal pressure as protection for its passengers. Such a atmospheric pressure at such altitudes is much below levels required to preserve adequate oxygen to keep passengers alive. Also rapid change in atmospheric pressure resulting from change in altitude causes discomfort. This discomfort increases in the concentration of nitrogen in the blood with rapid decrease in pressure."

Clearly, the people during the time of the Prophet (peace and blessings of Allah be upon him) were neither aware of change nor decrease in pressure with altitude nor that it results in any difficulty in breathing. In fact, it results in rupturing of the arteries at tremendous heights. Despite that, the Verse explains that Allah says:

﴿مَنْ يَشَأِ اللَّهُ إِذْ يَشَاءُ يَفْشَحْ صَفْرَهُ الْإِنْسَانِ وَمَنْ يَشَأِ اللَّهُ
يَجْعَلْ صَفْرَهُ كَيْفَ يَشَاءُ ۚ إِنَّكَ بِأَعْيُنِنَا ۚ قُلْ أَطِيعُوا اللَّهَ ۚ﴾

"And whomsoever Allah wills to guide, he opens his breast to him and whomsoever He wills to send astray, He makes his breast closed and constricted, as if he is climbing up to the sky." (Soorah Al-An'am 6: 125)

It explicitly points out that the breast of man becomes constrained as he climbs up the sky and that the constriction increases as his altitude increases until it becomes unbearable. This is the interpretation the scholars of the Arabic language have given the word *Al-Harar*.

The Verse expressed the ascension into the sky in the best manner "as if he is climbing up" since its basis - *Yafashu al-hi* the alphabet *Ta* was transformed to *Sad* and assimilated into the *Sad* and it became - *Yafashu* only and its meaning is that: It will make an ascension after another. Therefore, does not allude only a constriction experienced from the high altitudes in the atmosphere but also that it continues to increase until it becomes unbearable.

Glorified is He Who made hearing His Verses a source of bewilderment and confusion to a people and a means of reflection for

therefore, it is not his is — who perceived with the tongue in this Book, the prophets, the sages, the philosophers and sages, the scientists, his speech and related with the messengers, his symbolic expressions the intelligentia

Glorified is He Who revealed upon His unlettered servant:

﴿إِنَّمَا عَنَىٰ كَلِمَينِ يَكْبَرُ الْكُفْرُ﴾

"It is only those who have knowledge among His slaves that fear Allah." (Soorah Fati 35:28)

The scientific wonder in the Verse is the meaning of *Yassu'adu* continuous ascension that the floating in sky results in a constant in breathing. This is what science has only proven in our times.



Orbitations of the Universe

Orbitation is a characteristic of the universe

Allah, Most High, says in His Noble Book:

﴿وَهُوَ الَّذِي خَلَقَ اللَّيْلَ وَالنَّهَارَ وَالشَّمْسَ وَالْقَمَرَ كُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

"And He it is Who has created the night and the day, and the sun and the moon, each in an orbit floating." (Soorah Al-Anbiya' 21:33)

This Verse points us to an important fact related to the order of motion in the universe. Modern science partook in the discovery of the fact and in illuminating it after establishing that we live in an expansive universe in which motion depends on revolution which is like orbit about a central point. The Earth revolves in a specific orbit around the sun once every year and the moon revolves in a specific orbit around the Earth once every Arabic (lunar) month just as a number

planets have specific orbits in which they revolve around the sun. Most of these planets possess moons which orbit them. Scientists have so far observed over sixty such moons.

The Solar System in which the Earth exists revolves around the center of the Milky Way galaxy which in turn is a part of a hundred and thirty billion stars. As a group all the galaxies we are looking at orbit about a point known to us as the "Big Bang" as though by the spiritual picture of the universe we are looking at orbital motion or circumambulation as a universal system exhibited by every thing in existence.

If we turn our attention to the atomic world, we find that the atom which is not to be observed by anyone using the naked eye or with the aid of the most powerful microscopes, it is made up of an atomic nucleus whose diameter is one greater than one parts of a million of a



millimeter. As the electrons move revolving round in orbits. This implies that the atoms of a material be they solid, liquid or gaseous in the universe observe the phenomenon of orbit. Included in this are all the atoms that make up our bodies, food, drinks, air which we inhale, all living organisms whether plant or animal and every material thing in Earth such as the seas, sand and mountains or the heaven such as stars, planets, moons, + between the heavens such as gases, meteors, pulsars, comets, etc.

The world of living organisms does not contravene this universal norm which points to the unity of the universe and the Oneness of the Creator. Confirmed and Exalted is He. Modern science has revealed using the technology of powerful microscopes that the fluids in the cells of living organisms known as cytoplasm now dance around one off nucleus. The dominant form of motion in all these instances is a counter-clockwise direction.

Thus there are several orbiting objects, be they electrons orbiting a nucleus, or planets orbiting the sun or moon orbiting the planets

or star orbiting the centers of galaxies, or galaxies orbiting a center yet unknown to us, everything in the universe is orbiting. Our innate pure nature inclines us to contemplate another example of orbit, which Allah, Honored and High is He, has made one of the distinctions of Islam (the circumambulation of the Ka'bah, the Holy Mosque of Allah in Makkah) one of the rites of Hajj and Umrah.

Circumambulation around the Ka'bah is a virtuous worship whose significance is not appreciated by some. However it is in conformity with modern scientific facts which point to an enormous secret of the universe. The pilgrim testifies to pure Monotheism to Allah as a response to the call of God Who ordered Ibraheem, peace be upon him, to proclaim it to mankind. Thereby the pilgrim declares the statement of Allah, Most High:

يَا أَيُّهَا النَّاسُ إِنِّي جَعَلْتُ الْكَاعْبَةَ لِلْعَرَبِ وَالْعَرَبِ لِلْعَرَبِ وَالْعَرَبِ لِلْعَرَبِ
وَالْعَرَبِ لِلْعَرَبِ وَالْعَرَبِ لِلْعَرَبِ وَالْعَرَبِ لِلْعَرَبِ
وَالْعَرَبِ لِلْعَرَبِ وَالْعَرَبِ لِلْعَرَبِ وَالْعَرَبِ لِلْعَرَبِ

"And (remember) when We showed Ibraheem (Abraham) the site of the (sacred) House (the Ka'aba at Makkah) (saying): Associate not anything (in worship) with Me, (Ila ilaha illa Allah (none has the right to be worshipped but Allah: Islamic monotheism), and sanctify My House for those who circumambulate it and those who stand up for prayer, and those who bow (submit themselves with humility and obedience to Allah and make prostration in prayer etc.) And proclaim to mankind the Hajj (pilgrimage). They will come to you on foot and on every lean camel; they will come from every deep and distant (wide) mountain highway (to perform Hajj)." (Al-Hajj 27-26-27)

It is as if the Ka'bah is the center of spiritual gravitation which must necessarily occur between the Muslims and the Ancient House of Allah. This is the House whose direction all Muslims take in their prayers and whose names they utter whenever they utter the name of Allah. The spiritual gravitation is what makes every foot upon reaching the Ka'bah and spontaneously begin to circumambulate around it just as any celestial body trapped in the gravitation of a larger one begins to orbit it.

We also observe that the Muslims circumambulate around the Ka'bah in a counterclockwise direction in such a way that the heart (which is in the right half of the body) is closer to the center of gravitation and in this manner we also observe this right-handedness in the direction of motion of the planets performing the same counterclockwise motion. The direction and direction which have from the symbols Allah, a sense of passing right-handedness, points to the fact that the circumambulation is a universal motion which indicate a phenomenon of unification between the commandments of the Shariah and the secrets of universe. This is why the symbol of Tawaf which is the circumambulation of the Ka'bah is a statement of Monotheism.

"*Labbika Aulahuanna Labbika - Labbika la shurrika Laka Labbika inni Hamdu, wa-Ni mata Laka wal-Mulk - La shurrika Lak.*"

"Here am I, O Allah, Here am I. Here am I, You do not have any associate. Here am I. Certainly all praise, blessing and adoration belong to You. You have no associate."

We find that the scientific discoveries which researchers arrived at, undoubtedly prove that Islam is the religion of the true natural faith which presents mankind with the true and complete picture of existence and which conforms with the fact of a Divine authority preserving the secrets of the universe. Therefore, the statement of testimony *La ilaha ila Allah* (none has the right to be worshipped but Allah), ought to be understood before being pronounced on the tongue and being felt in the heart. This statement being a complete picture requires contemplating Monotheism and faith based upon certainty which merges between the union of the structure of an atom and the structure of the solar system and the union of energy by associating it to a single source though its forms may differ, and the union of motion from the revolution of electrons around the nucleus of an atom to the revolution of moon around planet and planets around the sun and the cyclical motion of the planets and the circumambulation of Muslims around the Ka'bah.

The Tawaf which commences from the time of taking up the Basmala (the name of Allah, the Most Gracious, the Most Merciful) at the Maqam (station) should actually be stopped shortly before the completion of the circumambulation of the Ka'bah.



The Rainy Sky

Allah, Most High, says

﴿ ٢٢٢ ﴾

"By the sky (having rain clouds) which gives rain, again and again."
(Soorah At-Tariq 86:1).

Interpretation:

Ar-Rai means to leave. It is said to mean that which holds water. Ar-Rai' the rain because it returns, i.e., keeps coming back. The Qur'an

﴿بِالسَّحَابِ الْمَرْفُوعِ﴾

"By the sky (having rain clouds) which given again and again."

It is also said that it means: one possessing benefit

Tha'labi said: It returns with rain year after year

Al-Luhayani said: This is because it returns with rain. Al-Fira'a said: It begins with rain and then returns with rain. ~~Very soon, they said: it~~ of rain, because it comes and goes and repeats itself

The understanding of the scholars of Tafseer

Al-Razi said in his interpretation of the Verse: Ar-Razi said: Ar-Rai is rain because it comes and repeats itself. You should know that the statement of Ar-Zuhri and other scholars of language is explicit that Ar-Rai is not a true name for rain rather it is called *Ar-Rai* figuratively.

The beauty of this figurative usage is in different perspectives.

First: Al-Qaffal said: It is as though a repetition of sound and linking the alphabets by it. So is the rain as it returns time after time it was named *Rai'an*.

Secondly: Arabs used to believe that the cloud took water from the seas and sent it upon the land.

Thirdly: The Arabs wished to be optimistic so they named it *Rai* so that it may return.

Fourthly: Rain returns every year.

If we know these meanings, then let us look at the statements of the scholars of Tafseer.



First: Ibn Abbas, may Allah be pleased with, said:

﴿بِالسَّحَابِ الْمَرْفُوعِ﴾

"By the sky (having rain clouds) which given again and again."

means one containing rain, the rain returns after another. Secondly: The coming of good from its direction time after time as time rolls by, it gives (good) repeatedly.

Thirdly: Ibn Zayd said: It (the sky) returns its sun as moon after their absence. However, the first statement is the correct one.

Al-Qurtubi said: Allah's saying: "By the sky (having rain clouds) which gives again and again" means one containing rain, returning with rain year after year. These are the statements of the scholars of Tafseer.

Scientific Facts

- ◆ The first layer of the atmospheric envelope – Troposphere – comes down upon the Earth with rain, snow and a storm is how it heat in the during the night by sending down carbon dioxide.
- ◆ The atmospheric envelope is a large protective armor protecting the Earth from poisons, meteors and destructive radiations. Thus it does by its fifth layer known as the Stratosphere.
- ◆ The fourth layer of the atmospheric envelope (Thermosphere) serves as a reflector which reflects shortwave radio signals to the Earth.

Scientific Explanation

Allah, Most High, says in His Mighty Book:

﴿بِالسَّحَابِ الْمَرْفُوعِ﴾

"By the sky (having rain clouds) which gives rain, again and again."
(Soorah Ar-Tariq 86:17)

This Verse indicates that the most important characteristic of the sky is that of *Ar-Rai*. So what is *Ar-Rai*? Linguistically, Ibn Mundhir said: *Ar-Rai* is something that holds water. Al-Luhayani said: It

was named 'Ar-Raj' because it returns with rain. The word 'Ar-Raj' is derived from 'Raj' meaning, return and reflection. The meaning of the verse is: "the sky performs the duty of returning, and reflecting."

Science has come to confirm this exegesis. Astronomers have discovered that the Troposphere serves to return to the Earth as rain what vapor is captured from water bodies. It is known as the Water Cycle.

Astronomers have also ascertained that the stratosphere, which contains the ozone layer, serves to return and reflect destructive radiation around the ultraviolet range back to space. Therefore it protects our earth from destructive radiation emanating from the universe. Thus it is regarded as a protective barrier that prevents most of the light and heat of the sun from reaching the earth as mentioned in the *Surah Zuhra* in *Rasulullah*.

As for the Thermosphere it serves to return and reflect short and medium radio waves and X-rays emanating from the Earth back to the Earth. This explains why it is possible to receive these signals at very great distances from the source station. This is explained in detail in the *Encyclopedia Britannica*.

It has indeed been found that the most important characteristic of the sky, which scientists have discovered in the twentieth century, is that it is a reflector.

Glorified is Allah Who says in His Miraculous Book,

﴿قُلُوبُهُ﴾

"By the sky (having rain clouds) which given again and again."

The Point of Wonder

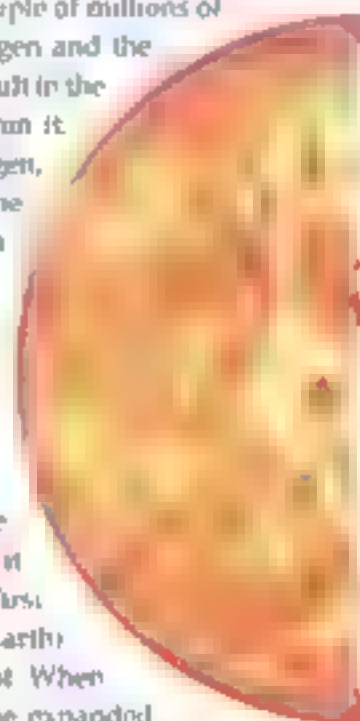
The point of wonder in this Verse of the Qur'an is that the most important characteristic of the sky is that of a reflector, and that which returns. This is what modern science has discovered in the twentieth century.

The Future of the Sun

Let Allah be the Curator of Science

The process of fission of hydrogen atoms to form helium in the interior of the sun can possibly continue for a couple of millions of years. However, the depletion of hydrogen and the proliferation of helium within it could result in the homogeneous distribution of matter within it. Helium is four times heavier than hydrogen, and this will imply an imperfection in the density of the material of the sun and a loss of equilibrium.

This would necessitate an all-encompassing motion in order to regain equilibrium within the sun. This occurs by the tremendous expansion of the outer material of the sun which causes a shrinking of its core. Then the color of the sun may change to red. By this expansion it would become gigantic and swallow the first three planets (Mercury, Venus and the Earth). This is why the sun is called a Red Giant. When the internal force in the core wanes, the expanded outer skin would be unable to support itself upon anything so the body of the sun flows over itself in a process known as *Takweer* - heaving in and out. That occurs as a result of gravitational pull of its parts upon each other, thus it would contract rapidly and crush the material of the sun. The different parts intermingles as the atoms become so closely packed that they nearly fuse. However, the repulsive negative force of each electron's envelope prevents this fusion at very close distances. Thereby, the negative electron forces balance out the gravitational force which tends to crush and fold the sun. Whenever this occurs then the sun will be said to have reached its terminal state.



and will be called a White Dwarf because nothing would remain of its radiation except a feeble light. Subrahmanyan Chandrasekhar. (1990).

And an American theoretical astrophysicist discovered that all stars whose mass is less than one and a half of that of the sun eventually end up as white dwarfs. While dwarfs are extremely dense as a cubic centimeter of it weighs up to a ton. Therefore, we comprehend the Word of (Allah). Most High.

﴿ وَاللَّهُ يَخْتَارُ ﴾

"When the sun is *kumwira* (wound round as lost its light and is overthrown)?" (Soorah Al-Fariq 86:1).

The sun is eventually going to *Al-Takweer* (be wound round) until it becomes a White Dwarf for the word *kumwira* occurring in the verse does not occur arbitrarily nor does it imply the loss of the sun's light and its extinction. The sense of *kumwira* is what we read in the language encyclopaedia that the root verb (of *kumwira*), *kawwara*, means: to gather and revolve and this is exactly what happens during the gravity-induced collapse, as the material of the star contracts and revolves around itself. This is why we have employed the terminology *collapse* as an Arabic terminology for what happens during the gravity-induced collapse.

Chandrasekhar and others after him have discovered that White Dwarfs do not occur in a single form. When the mass of the White Dwarf is greater than the size of our sun it is possible for it to further evolve: it may explode and its constituents disappear totally. Thus it (White Dwarf) is not a terminal state. However, when the mass of the White Dwarf is equal to the mass of our sun then it has come to its terminal state whereby its light becomes feeble. It is possible for it to remain in this state for thousands even millions of years. From this perspective we can appreciate the Word of (Allah) the Exalted.

﴿ وَالشَّمْسُ كَرَّةٌ مُّسْتَقَرَّةٌ سَعِيدٌ ﴾

And (the sun runs on its fixed course for a term (appointed). That is the decree of the Almighty, All-Knowing." (Soorah Ya Seen 36:38).



The Moon was once ablaze then it was extinguished

Allah, Most High, says:

﴿ وَجَعَلْنَا لَيَالٍ وَنَهَارًا آيَاتٍ ﴾

And We have appointed the night and day as two *Ayat* (signs, etc.). Then, We have obliterated the sign of the night (with darkness) while We have made the sign of the illuminating." (Soorah Al-Isra 12:12).

linguistic Expert: A

Ibn Mandhooj said: *Ayah* means sign, and Ibn Hamzah said: An *Ayah* from the Qur'an such as a sign which points to something else.

understanding of the scholars of Tafseer

The noble Companions of the Prophet, peace and blessings of

﴿وَجَعَلْنَا لَيْلٌ وَالنَّهَارَ آيَاتٍ﴾

"And We have appointed the night and day as two Ayat. Then, We have obliterated the sign of the night (with darkness) while We have made the sign of the illuminating." (Soorah Al-Furqan 17-12)

The Verse points to a scientific fact, which was unknown until the twentieth century in the distant past, the moon was ablaze and then Allah Most High obliterated its light. The indication is by the Quran is explicit as mentioned by Abdullah bin Abbas may Allah be pleased with him, when he said: "The moon once radiated light as the sun does (today), and it was the sign of the night. Then it was obliterated and the darkness now in it is a sign of its obliteration."

This is the statement of a noble Companion which he derived from the Quran about fourteen centuries ago. So, what have astronomers to say concerning this issue?

Astronomy has eventually discovered that the moon was ablaze in the distant past then its light was obliterated and its blaze was extinguished. Advanced observations and the earliest artificial satellites have revealed images of the moon, which revealed the existence of several volcanic craters, hills and low valleys. It was not possible (at the time) for scientists to understand completely the nature of the moon until the American explorer Neil Armstrong landed on its surface in 1969. Thereafter through detailed astronomical and geological investigations of its surface and analysis of its soil, astronomers were able to make a categorical pronouncement such as that made by the American space agency (NASA): "The moon was formed about 4.6 billion years ago during its formation it experienced gigantic collisions with pulsars and meteors due to the tremendous heat it was melted resulting in the formation of the outer (crust) known as Maria and vents known as craters which began to spew enormous amounts of lava until the valleys were filled up. Then the moon cooled its volcanoes became dormant and stopped spewing lava. Thus, the moon extinguished after it had been blazing."

When we return to the Verse of the Quran, we perceive from the

Allah be upon him, have derived (from the Verse) more than fourteen centuries ago that the moon once gave light, then Allah obliterated its light. They mentioned this while interpreting the statement of Allah, the Exalted, in Soorah Al-



﴿وَجَعَلْنَا لَيْلٌ وَالنَّهَارَ آيَاتٍ﴾

﴿وَجَعَلْنَا لَيْلٌ وَالنَّهَارَ آيَاتٍ﴾

﴿وَجَعَلْنَا لَيْلٌ وَالنَّهَارَ آيَاتٍ﴾

"And We have appointed the night and day as two Ayat. Then, We have obliterated the sign of the night (with darkness) while We

have made the sign of the illuminating." (Soorah Al-Furqan 17-12).

Ismail bin Kathir narrated in his Tafseer that Abdullah bin Abbas, may Allah be pleased with him, said in his interpretation of the Verse: "The moon once radiated light as the sun does (today), and it was the sign of the night. Then it was obliterated and the darkness now in it is a sign of the obliteration." (Rooft ul-Mufhim by Al-Aloosi Vol. 15 P 26)

Scientific facts

- Astronomers have discovered after man was able to voyage to the moon from the image obtained using artificial satellite that the moon was once ablaze but was extinguished and lost light

Scientific interpretation

Allah the Most High said in His Majestic Book

use of the word "obliterated" which linguistically means to erase or remove, that, Allah removed and erased the light of the Moon. The intended erasing is not of the moon, or it exists apart from its light as light and radiation. It is a metaphor for the syntax, the Qur'an which says: "The sign of the night is the moon and that of the daytime is the sun." The erasing is of the light and this is why Allah says:

﴿وَجَعَلْنَا لَيَالٍ قَالِيَةٍ مُمِيزًا﴾

"and We made the sign of the day light illuminating."

The use of the word illuminating refers to the fact that the light of the moon was obliterated and that of the sun remains illuminating.

So, who informed Muhammad, peace and blessings on Allah be upon him, of this fact which requires space shuttles and geoscientific and geological analysis to be discovered and which has not been known until a few decades ago?

(Allah knows best) Allah, the All-Knowing, the All-Wise Who said

﴿وَرَبِّكَ اللَّهُ لَتَكْفُرُنَّ بِاللَّهِ رَبِّكَ﴾

And Allah explains to you His Verses. And Allah is All-Knowing, All-Wise" (Sooth An-Noor 24:18)

Scientific References

According to NASA reports: "The moon is experiencing very slight activity and vibration and very low outflow of heat from its interior, which indicates that the principal internal activity of the moon ended a long time ago. It is known that the moon billions of years ago was exposed to some volcanic activity due to differentiation of its crust. Thereafter, it was exposed to evidence of volcanic lava. However, the lava no longer flowed and needed no large troughs, valleys (such as the Marias) of the lava stepped spreading on the last few billions of years in its history. The moon became calm and dormant geologically with the exception of downpours of asteroids and meteors upon its surface."

Currently, scientists believe that the moon is the result of a collision between the earth and a small planet, which preceded the collision. This occurred about 4.6 billion years ago. The huge collision dispersed vaporized materials from the surface of the earth and separated it from the round the earth. Subsequently, dust size, cooled and shrank in regions, which later solidified to form the moon."

The Agency also mentions: "About four billion years ago, a series of major collisions occurred with the surface of the moon and formed massive depressions. These depressions today, the locations of trenches known as Maria similar to the ... and ... trenches."

In the period between 4 and 2.5 billion years ago, the volcanic activity filled the trenches with dark lava known as basalt. After the period of volcanic eruption, the moon cooled and became relatively dormant with the exception of the activities related to collisions of meteors and comets.

The Poem of Wonder

The scientific wonder in the Verse of the Qur'an is that it points to the fact that the moon used to radiate light and then this was erased after it became dark. Allah says: "... and the sign of the night is the sign of the moon and this is what satellite images and geological analysis of the moon's surface have revealed. For the twentieth century. And Allah knows best."



The missing mass in the universe

The problem of the missing mass (in the universe) is considered of the greatest problems confronting astronomers. They generally refer to this mass as Dark Matter. It cannot be seen, though it constitutes ninety per cent of the assumed mass of the universe. According to the calculation of scientists, the visible universe contains about a hundred billion galaxies and each galaxy contains about hundred billion stars. However, all of this does not account for more than ten percent of the assumed mass of the universe. In the light of this, we find that the density of the universe relative to the anticipated cover is much smaller than the actual density. Critical density as an example is mathematically estimated at between three to four hydrogen atoms per cubic meter of space to enable the material (of the universe) to preserve an equilibrium with gravity preventing the universe from dilatation.

However, the actual density of the universe does not exceed one to two hydrogen atoms per cubic meter of cosmic space. This means that there is a missing mass in the universe. We do not know anything about it. It possible it is as described by the explorer Nabeel Abdul Fatah in his book *Al-Kunh, Dhimm Al-Mahul - The Universe The Unknown* as tiny particles or chemical elements about which we know nothing and which has no kind of a familiar quantitative unit, most as such as those used to measure chemical elements because it is fundamentally incongruent with the modern theory of the structure of an atom.

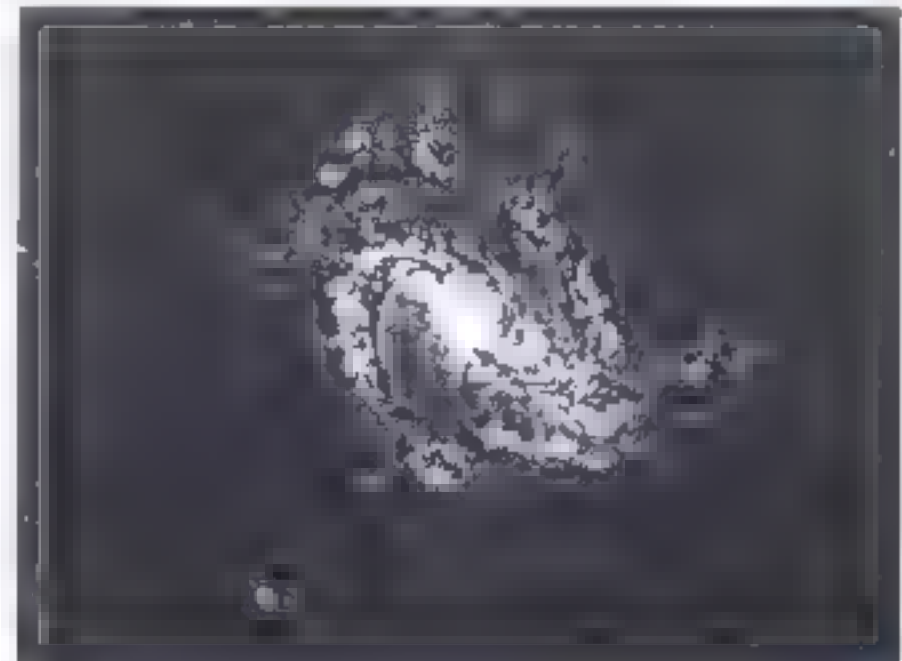
No one knows the nature of the structure of this matter. Some scientists opine that it is so cold that no radiation or light which can be observed emanates from it, unlike stars and galaxies that vibrate due to nuclear activity. The meaning of cold particles in physics is that they are experiencing very slow movement. Therefore, it is not possible to gather millions of stars into a galaxy and thousands of galaxies into large clusters.

However, the Dark Matter is said to not then it means its particles are in rapid motion and that it is experiencing an important activity. Thus, it generates a strong gravitational pull which forces stars into the

galaxies and acts to equilibrate the universe. But if this were true, the particles of this matter should have been discovered from the radiation and heat emanating from them. This had not happened, so scientists find themselves faced with a dilemma.

Therefore, scientists re-computed the mass of the material in the visible universe and added the matter contained within Black Holes which are widespread in cosmic space and the matter originating from the explosion of stars between galaxies and the mass of neutron particles floating around in the universe. They also added the numerous radiations from the universe. After all these additions, the mass of the universe still did not exceed thirty percent of the best estimation of what the mass of the universe ought to be. Therefore seventy percent of its mass is missing.

Confronted with this dilemma some scientists proposed an explanation of the nature of the structure of this Dark Matter. Supramarily, the existence of a new type of particle in the structure of the Dark Matter. These particles are known as Weakly Interactive Massive Particles or WIMP for short. However, these particles have yet to be



discovered by any sensing instrument

Some other scientists proposed that dark matter could be a type of cosmic strings which are extremely long strings of matter that stretch the heavens like the strings of a giant harp. They also proposed these strings which link between galaxies and stars with other galaxies since the number of galaxies. These scientists separately were in agreement as things which have make up the constituents of Dark Matter. The theory of White Holes emanated from these investigations on the basis that each galaxy contains at its core a white hole possessing extremely high density which makes the galaxy expand (by trapping material). However, we do not see this hole or perceive it contrary to the black hole which we observe with the emission of a stream of radiation, which emanate from it when it surrounds and swallows a huge neighboring star.

We do not see white holes or perceive them because its infinite density traps all light. However, it expands the galaxy by equilibrating, consolidation and gravitational pull by which it preserves the stars in its sphere of influence. But the problem is that all these theories do not explain to us the origin of these white holes as we know of Black Holes. The issues of Dark Matter and missing mass remain perpetua puzzles which baffle astronomers and they are still searching for an explanation. And Allah, the Exalted, knows best and He is the Best Judge.



Holes in the Universe

The openings in the universe are invisible or more appropriately put are pitch-dark regions. Within a few years, precisely the late seventies and the early eighties, their existence became known following a new mapping of the space to get a three-dimensional map of space.

Astronomers were surprised by the presence of several openings as though space was filled with them. This map was re-constructed in more detail and accuracy to include galaxies which were over a billion light years away. The initial doubts turned into reality as it became clear that vast majority of galaxies, if not all, fall on the flanks of gigantic opening whose diameters are up to one hundred and fifty million light years and which may contain no radiating matter. In 1981 a gigantic opening with a diameter of two hundred and fifty million light years was discovered in the stellar constellation known Buraisha.

It is surrounded by a wall of galaxies. Its center is observed to be free of galaxies. In 1989, a larger wall of galaxies with a length of greater than five hundred million light years, its width about two hundred million light years and a thickness of roughly fifteen million light years was discovered. This wall, known as the Great Wall contains numerous gigantic galaxies. These series of discoveries led to the belief that the universe was made of openings with galaxies on their fringes. The similitude is as a piece of natural sponge which is made up of many holes surrounded by walls of sponge.

Astronomers and physicists at present are attempting to explain the mystery of these openings and their existence. A strong proposed interpretation of these openings is what is known as Cold Dark Matter. It is thought to be made up of matter which is not dense, is sparse, is not visible, glowing, in the form of stars and galaxies. These openings could contain Black Holes, which swallow anything coming close, be it luminous matter or non-luminous matter. Even light rays are unable to escape due to the strength of its gravitational force. We cannot describe more profoundly the nature of the Cold Dark Matter. Till date, no one has been able to establish its existence. It is possible for science to improve its understanding about the material construction of these openings and whether or not they contain black holes by detailed and lengthy study of the motions of galaxies which make up those holes and whether they are orbuing the centers of the openings or are gravitating towards it and the speed of revolution or gravitation.

Returning to the Verse, which mentions openings in the heavens:

﴿ قَدْ بَيَّنَّآ إِلَى الْكَوْنِ قَوَاعِدَهُ كَيْفَ بَدَّلْنَاهَا وَمَا مِنْ رِيفٍ ﴾

"Have they not looked at the heaven above them how we have made it and adorned it, and there are no rifts in it." (Soorah Quf 50:6)

The vast majority of the scholars of *Tafsir* have interpreted: "and there are no rifts in it" that "ma'a" here is one of negation, i.e., the heavens (cosmos, space) are free of openings (cracks) which would result in a weakness in its structure. However, science presents us another interpretation which could indicate that the word "ma'a" in the last sentence in the last Verse quoted is that of a relative pronoun, as with the meaning:

that which and not "ma'a" that shows negation. Therefore, the Verse would read as "Have they not looked at the heaven above them, how We have made it and adorned it?" and "Have they not looked at the openings of the heaven." In fact, the Verse is more synchronic in this form with its astonishment context as the Verse begins with: "Have they not looked!" These openings assist us in understanding the Verse and (Allah knows best) it appears to be the intent of the Verse: the construction and the documentation of the Verse in this syntax which allows for the possibility of the two interpretations is one of the linguistic miracles of the Qur'an and a proof of the possibility for our understanding of the meaning of the Qur'an to advance. Had the verse come with the syntax: "Have they not looked at the heaven above them how We have made it and adorned it, and We made it in the openings" then this would have been a clear (uncontrovertible) negation of their existence. Then astronomers in modern times would have opposed the Qur'an, saying science has proved the existence of these openings. How can



the Qur'an negate it? And were the Verse to mention it (openings, holes, in an affirmative manner saying: "Have they not looked at the heaven above them, how We have made it and adorned it and how We have made therein rifts." Then the Bedouin, rather all who look up the sky with unaided eyes, would have wondered (at the meaning of the Verse). He would see a blue homogeneous and better seen day now and a dark sky in every direction at night beautified with lamps. Then he would

question in confusion: I do not see but a beautiful perfect sky, so where are the openings?

The way in which the issue has been mentioned (in the Qur'an) allows every reader no matter the variance of their civilizations or the old (as in their understanding of the verse to understand it according to their own level of advancement and contrasting comprehension easily. Thus, the one who sees no openings in the heavens and is unaware of their existence would read the verse with "lā" in the negative context and that concurs with his seeing and knowledge and the one who sees openings in the heavens or knows of their existence reads the Verse with "lā" in the affirmation context and that also concurs with what Allah has made him understand of knowledge and sight. **Glorified is He Who revealed the Qur'an**

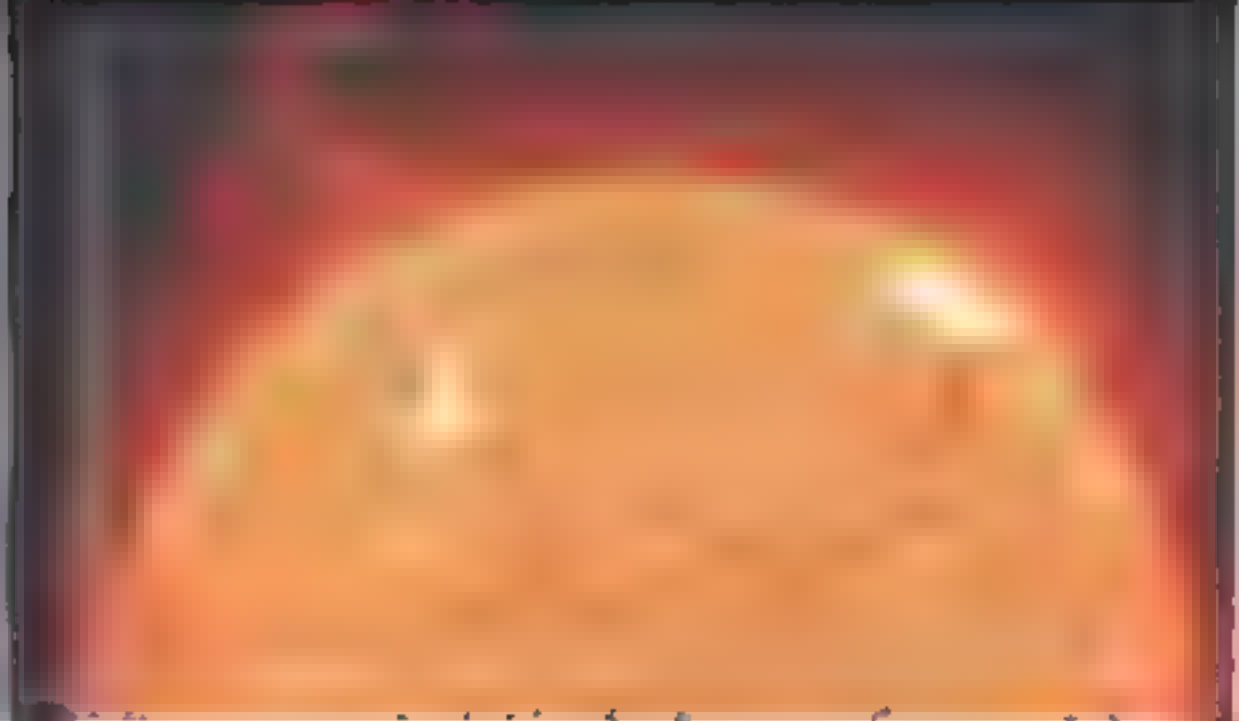
﴿وَبِالْحَقِّ أَنزَلْنَاهُ وَبِالْحَقِّ نَزَلَ﴾

"And with truth We have sent it down (ie the Qur'an) and with truth it has descended. And We have sent you (Muhammad) as nothing but a bearer of glad tidings (of Paradise for those who follow your Message of Islamic Monotheism), and a warner (of Hellfire for those who refuse to follow your message of Islamic Monotheism)." (Soorah Al-Isa 17: 05)

And the All-Wise, the Mighty spoke Truth when He says

﴿أَلَمْ يَتَفَكَّرُوا الْقُرْآنَ وَلَا كَانَ مِنْ مِّنْ قَبْلِهِ مِثْلُ شَيْءٍ﴾

"Do they not then consider the Qur'an carefully? Had it been from other than Allah they would surely have found there in much contradictions." (Soorah An-Nisa' 4 R2)



The movement of the Sun, its course and its end

Allah, Most High, says

﴿وَالشَّمْسُ تَجْرِي لِمُسْتَقَرٍّ لَّهَا ذِكْرُ طَوْرِ الْمُرْسَرِّ﴾

"And the sun runs on its fixed course for a term (appointed). That is the Decree of the Almighty the All-knowing." (Soorah Ya Seen 36: 38)

And Allah, the Mighty and Sublime, says

﴿وَالَّذِي يَجْرِي لِأَجَلٍ مُّسَدَّدٍ﴾

"...each running (its course) for a term appointed" (Soorah Ar-Ra'd 3: 2)



And He says

﴿وَكُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

"They all float, each in an orbit" (Soorah Ya Seen 36:40)

And the sun is the prota of

﴿وَالشَّمْسُ تَجْرِي لِمُسْتَقَرٍّ لَّهَا﴾

"And the sun runs on its fixed course for a term (appointed)

ie. in a place which it cannot transgress (exceed) time-wise or location-wise. It is also said "to a time ordained for it

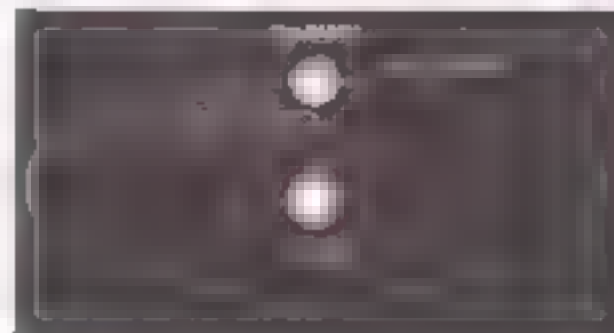
A Historical Preamble

The Chinese and Babylonians were able to make predictions using the eclipses of the sun and moon. Then, interest grew at the time of the Greeks and Ptolemaeus. Aristotle and Badieumus said that the Earth was stationary, that it was the center of the universe and the sun & other planets revolved round it in a spherical closed and closed universe. In the beginning of the third Century BC Aristarchus (of Samos, the Greek astronomer) postulated another view. He proposed that the Earth revolved around the sun but that the sun was a stationary celestial body. The vast majority rejected this view, accused its proponents of heresy and severely punished them. This situation remained thus until the end of the Middle Ages.

In 1543, Polish scientist Copernicus published his book on astronomy

and planets and established therein the view that the Earth was revolving around the sun. He like his predecessor, Aristarchus, also assumed that the sun was stationary. The theory later became a fact with the invention of the telescope. Scientists began to gradually lean toward this view until the Italian scientist and astronomer, Galileo was able to arrive at this fact via his constant viewing and monitoring of the movement of the planets and stars. This was in the seventeenth century. In the same century, Kepler the German scientist and astronomer concluded that the planets do not orbit the Earth alone but also float in specific elliptical orbits around a center which is the sun.

Things remained in this state until the English scientist Richard Carrington observed in the middle of the nineteenth century that the sun revolves around itself in a space of time he estimated as twenty-eight days from his study of the black spots



discovered on the sun. This was mentioned by the American space agency NASA. Scientists today believe that the sun has spent half of its lifespan and that it will gradually evolve into an extinguished star after another five billion years, when its energy (heat) would have waned (by cooling) and gases within it would have condensed.

As to

- Kepler discovered that the sun and its associated planets float



around in specific orbits according to pre-arranged order.

◆ Carrington discovered that the sun revolves around itself and that the sun will soon be extinguished when its fuel and energy are exhausted. Then it will join the ranks of Dwarf Stars and then die out.

Allah, the Mighty and Sublime, says in His Magnificent Book:

﴿وَالشَّمْسُ كَرَّةٌ مُسْتَقَرَّةٌ ۖ سَبَّحُ لِلَّهِ فِي الْيَوْمِ الْحَمْدُ﴾

And the sun runs on its fixed course for a term appointed. That is the Decree of the Almighty, the All-Knowing." (Soorah Ya Seen 36:38)

The Verse indicates that the sun is in a state of continuous motion until it gets to the final resting place ordained for it. This Qur'anic idea was not known to modern science until the nineteenth century when Carrington discovered that the sun and its planets all revolve in specific orbits according to specific pre-arranged order. This is in confirmation of Allah's Words:

﴿وَكُلٌّ يَجْرِي لِأَجَلٍ مُّسَمًّى﴾

"Each running its course for a term appointed."

Soorah Ar-Rad 3:2

See what is the scientific explanation of the sun's motion. The sun is

a regular star, revolving around the center of the Milky Way galaxy as mentioned in the American Encyclopedia. The sun moves at a speed of two hundred and twenty million kilometers per second around the center of the Milky Way galaxy, which is 2.5×10^{17} kilometers away from the sun. Floating among stars are constellations and it completes a revolution around the galaxy every two hundred and fifty million years. Since its birth 4.6 billion years ago, the sun and its planets have completed eighteen revolutions around the Milky Way galaxy, which itself moves as a group of galaxies. The group moves as a massive accumulation of galaxies and this massive accumulation moves as a more gigantic accumulation. Thus, every celestial body in the universe runs, revolves and floats about. We find the scientific meanings in Allah's Words:

﴿وَكُلٌّ فِي فَلَكٍ يَسْبَحُونَ﴾

"They all float, each in an orbit." (Soorah Ya Seen 36:40)

But where is this final resting place which the Noble Qur'an talks about in the Words of Allah, the Exalted:



﴿وَالشَّمْسُ تَجْرِي لِمَقَارٍ﴾

"And the sun runs on its fixed course for a term (appointed to a final resting place)"

Astronomers estimate that the sun is floating toward a time when its fuel is exhausted and it is extinguished. This what scientists have offered as the final state of the sun. When added to the discoveries of the twentieth century that just as all other creatures grow, age, and then die, scientists at NASA have mentioned that when the energy of the sun is exhausted, it will join the rank of Dwarf Stars and die out. At its death, the possibility of life on the Earth will vanish. However, when this will happen is unknown to anyone except Allah, Who said

﴿يَسْأَلُونَكَ عَنِ السَّاعَةِ أَيَّانَ مُرْسَاهَا قُلْ وَمَا عَلَيْهَا مِيقَاتٌ يَحْكُمُ بِهَا﴾

"They ask you about the Hour (Day of Resurrection) When will be its appointed time? Say! The knowledge there of is with my Lord (Alone). None can reveal its time but He," (Saprah A, Araf 787)

Scientific Reference

NASA stated that the sun revolves in the same direction as the Earth names the Carrington Revolution, named after the Richard Carrington who was the first to observe the sun's orbit (about itself) every forty seven or twenty eight days.

The Encyclopedia states that our



﴿وَالْأَرْضُ مَوْجِدَةٌ﴾

galaxy, the Milky Way, contains about one hundred billion stars and all these stars revolve along with the gases and cosmic dust between them around the center of the galaxy.

NASA also mentions that the sun has existed for 4.6 billion years and it possesses enough energy to exist another 5 billion years from the present.

Point of Wonder

The miraculous point in the Verse is that it establishes that the sun is moving and floating in the universe. This is what modern astronomy has discovered several centuries after the revelation of the Qur'an.

﴿وَالْأَرْضُ مَوْجِدَةٌ﴾



Intelligent Life Forms in the Universe

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The greatest proponent of the belief in the existence of other intelligent life forms in the universe was the American scientist Dr. Carl Edward Sagan, the director of the Laboratory of Planetary Studies at Cornell University. He has an Indian origin. The indifference of some scientists and philosophers in the west to Carl Sagan's research into the existence of other intelligent life forms in the universe are

the possibility of communicating with them is due to the fact that Hinduism and Buddhism as religions do not limit contemplating intelligent life to other than man. But the heavenly revealed religions (Judaism, Christianity and Islam) prevent contemplating the existence of other intelligent life-forms other than man on Earth. Astronomical observations using the space probe Hubble launched by NASA in the eighties show the number of stars in the visible universe as 10 billion. If the possibility of intelligent life-forms were one in every billion of planets which orbit stars in a manner similar to the planets of our Solar System, and if the number of stars in our galaxy alone is two hundred billion, then the possibility of intelligent life-form in our galaxy would be two hundred planets. This is theoretically speaking.

Practically, however, the Green Bank Observatory, in Virginia, America, was established in 1960 with the objective of listening in space using artificial radio waves, in respect to humanity, this was the first



cautious research attempt to communicate with existence elsewhere in the universe. The signals transmitted by radio and received by stars every year in 1959 by the study of astronomer Berkeley states commenced a study of radio signals from beyond the Earth for spontaneous intelligent life forms. Currently, the largest antenna—a dish three hundred meters in diameter—is found in the town of Puerto Rico on the Caribbean Sea. It is connected to a super-computer with extraordinary computing speed to detect any radio signals from the minutest wave-lengths—as small as a millimeter—to long wave-lengths kilometers in length resembling artificial signals from other intelligent creatures in the universe.

Though the existence of other intelligent life-forms in the universe is yet unproven, however many scientists researching the existence of other intelligent life-forms in the universe anticipate that the twenty-first century is the century of breakthrough in communicating with such creatures.

Since the Qur'an has provided science in establishing several truths which science only discovered centuries later, it is not strange that the Qur'an should inform us and inform man (for the guidance of whom it came) of something which science has yet discovered nor examine the existence of life-forms in the heavens similar to that on Earth as in Allah's statement:

﴿لَهُ الْفِطْرُ سَبْعُ سَمَوَاتٍ وَمِنَ الْأَرْضِ أَرْضٌ يُفْقَرُ إِلَيْهَا سُبْحَٰنَ اللَّهِ عَمَّا يُشْرِكُونَ
لَهُ الْفِطْرُ كُلُّ شَيْءٍ قَدِيرٌ ۚ﴾

"It is Allah Who has created seven heavens and of the Earth the like thereof (i.e. seven). His command descends between them (heavens and Earth) that you may know that Allah has power over all things and that Allah surrounds (comprehends) all things in His knowledge (Soorah At-Taaq 65: 12)

This Divine order indicated in this Verse must surely refer to intelligent beings present upon these other planets beyond our Solar System and it is possible that scientists in future will discover it when

the time is right for human information. This anticipation of life in space similar to that on Earth is supported the statement of Allah, Revealed and Exalted is He:

﴿وَرَوَىٰ يَسْجُدْ مِنْ رَبِّ الْمُسْمُونَ وَالْأَرْضِ طُوفًا وَكُفًًّٰ وَيَسْجُدْ وَالْقَمَرُ وَالْأَسَدُ﴾

"And before Allah (Alone) falls in prostration whoever is in the heavens and the Earth, willingly or unwillingly and so do their shadows in the mornings and in the afternoons." (Soorah Ar-Ra'd 13: 15).

Truly, the Qur'an is the everlasting miracle of Allah and it is the singular Divine Book which has not changed and which concurs with modern science, never conflicting with it.





The Birth of the Universe

This enormous and vast universe whose limit is not known to man has been an object of query and curiosity for ages. The questions surrounding it in the mind are numerous and complex. For example, how did this universe come into existence? What is its age? Did it have an origin or is it primordial and eternal?

These are some of the questions, which have been a point of contention between Muslim philosophers for hundreds of years. As for atheistic (unbelieving) philosophers, they have claimed that the

universe requires no creator because its matter is eternal (it has always existed). Therefore, they have attributed to matter one of the attributes of the Creator and that is eternity. This is why one of their principles of physics is that "Matter can neither be created nor destroyed."

Imam Ali Hamud Al-Ghazali, may Allah have mercy upon him, was the first person to resolve the problem of an ancient, eternal universe and respond to all questions relating to the interval of omission, i.e., the intervening period of time between eternity and the creation of the universe. Thus, he said that the universe came into existence and that one did not exist before it, i.e., time and space started after the creation of the universe because time is inextricably linked with motion. Were we to imagine that everything in the universe stopped moving then time itself will pause, meaning then there will be no time. So, it is erroneous to contemplate the existence of time before the creation of the universe.

Since the theory of relativity indicates that time is the fourth dimension, it is intuitive, therefore, that time should not exist in a universe whose other dimensions have not come into existence (x, y, z dimension coordinates). We do not intend here to delve into the fineness of philosophy, which could bore the reader and be of no benefit to him. Rather, we wish to point to another scientific theory about the birth of the universe and how it establishes, using scientific evidences that the universe had a beginning and that it came into existence some billions of years ago.





The universe: Between stationary and motion

In reality, the discovery by man of the phenomenon of radiation was the first blow at fault to the theory of eternity of matter. So long as the sun and all other stars are burning, and emitting radiation, then necessarily they must have a beginning. Had they existed from eternity then their fuel would have been exhausted billions of years ago. However, materialist scientists deliberately ignored this fact and continued to defend their opinion that the universe is eternal and requires no creator.



The steady state theory, which was the acceptable theory in scientific circles in the middle of the twentieth century, states that the universe is stationary and was infinite time-wise and spatially. This is an example of theory of origin of the universe, which serves as an acceptable reference for the materialist theory. It was chosen to negate the most important claim of theirs – the eternity of matter.

However, physics presents important means of knowing several characteristics of celestial bodies and stars. In 1913 Vesto Melvin Slipher an American astronomer discovered that some of the bodies previously thought to be cosmic dust are moving away from us at a speed of one thousand eight hundred kilometers per second. This discovery came as a big surprise to scientists and these bodies turned out to be galaxies distant from us. Therefore, Edwin Hubble in 1929 published his famous rule: "Galaxies move away from us at speeds directly relative to their distance from us."

It later became clear that galaxies are not only moving away from us they are also getting farther from each other. And this means that the universe is continuously and constantly expanding in confirmation of Allah's Words:

﴿مَّا جَعَلُوا رَبَّهُمْ إِلَّا رَحْمَةً﴾

"With power did We construct the Heavens. Verily, We are able to extend the vastness of space thereof." (Soorah Adh-Dhaariyat 51-47)

The Primordial Broth

Since the universe is constantly expanding, were we to rewind a film (of its history), then necessarily we would find the entire universe was in the past centered at a simple point known to scientists as the Primordial Atom or Primordial Broth. Other scientists opine that the size of this point is equivalent to a zero (0) and its mass was infinite. This is another way of saying the universe originated from nothing as this is the meaning of its size just equal to a zero.

However, what sort of power is capable of hurling a hundred billion



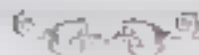
galaxies with such extreme speed, locating one at a great distance from the other, thereby building such an expansive universe? It is not possible that it is the force of gravitational pull or the repulsive force between galaxies. The gravitational pull is on the planets, stars and bodies toward a center and does not fling them outward. Likewise the repulsive force between the galaxies or each galaxy is also the same scenario. Considering the nature of charges between positive and negative in the universe, this kind of force is actually nonexistent between celestial bodies.

Therefore, a huge explosion must have occurred at the birth of the universe and it was responsible for the expansion of universe. Scientists have called this huge explosion the "Big Bang". After some revisions on the "Big Bang" theory, its actual workings read summarily as: "A huge explosion occurred to this Primordial Atom which contained all matter and energy contained in the present universe. At the first moment of the huge explosion, its temperature rose to several trillions of degrees when the paired atoms, neutrons, protons and electrons formed and these formed the atoms. These atoms made up the cosmic dust from which the galaxies originated thereafter."

When was the explosion of the Universe?

When did this "Big Bang" occur? There is no certain date yet. However, if we recall that Hubble's estimate for one trillion light years is 3 kilometer per second, we get a figure of twenty billion years. However, we should not forget that the speed of expansion of the universe and spacing of the galaxies is not constant. It was faster in the past. Thus the history of the universe is at least greater than billions of years. This is the strongest opinion presently. Hence, the evidences of the "Big Bang" theory is the existence of cosmic radiation. Scientists have said that an explosion like this must necessarily leave behind radiation. These radiations were detected when NASA launched an artificial satellite into space in 1969 for confirming the existence of these radiations. It was equipped with modern sensor gadgets. This artificial satellite required only eight minutes to detect this radiation and measure it.

Another evidence in support of this theory is that the relative amount of



radioactive hydrogen and helium in the universe are quite close to the theoretical relative abundance according to this theory. Where the universe eternal existed, no atoms, then all is hydrogen would have transformed and turned to helium.

Proponents of eternal existence of the universe in dilemma

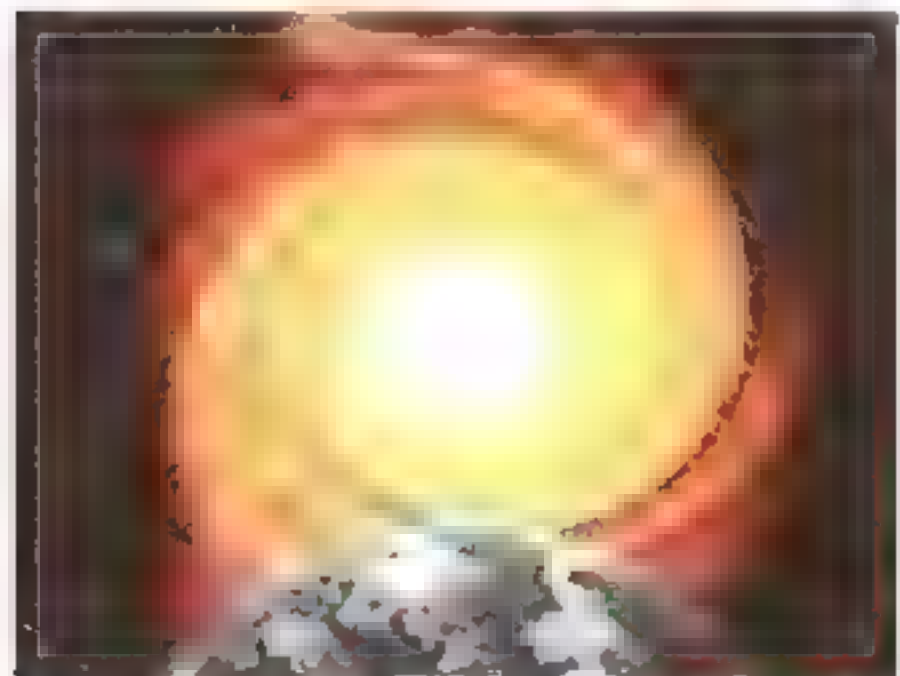
The importance of the "Big Bang" theory is not restricted to the fields of science and astronomy alone. It also dispossessed philosophies and atheistic scientists of a weapon of retort against theists upon which they used to depend because it ended the myth of eternity of matter and the universe.

This theory has vexed several scientists and atheistic philosophies. For example, the atheistic philosopher Anthony Philip said: "There is no Awareness benefits man from a psychological perspective and I shall base my opinion upon awareness. The existence of the Big Bang is something really embarrassing to free thinkers because science is attempting an idea which the religious books forbid. The idea that the universe had a beginning. The scientist, Denis Ziskow, one of the strongest proponents of the theory of a stationary non-evolving universe) said: "I did not defend the theory of a stationary universe because it was correct, but because I hoped that it was correct. However, after the accumulation of evidence, it has become clear to us that the time was over and it was necessary to completely abandon this theory of a stationary non-evolving universe."

Added to the fact that matter was created and not eternal and that the universe has a beginning, it indicates the existence of a Creator and that the universe was created by a Creator. The nature of this Big Bang adds another evidence that the universe was created according to precise measurements and with admirable accuracy. As we know, an explosion is always destructive, devastating, dispersive and scattering matter. However, when we observe an explosion of such severity and shock not only in the formation and construction of a perfectly organized universe, then there must be behind it a Powerful Hand, Knowledge, Design and similarly accurate estimation greater than the ordinary human level at the beginning. But the scientist, Fred Hoyle pointed out when he said: "The Big Bang theory tells us that the universe originated from

a huge explosion and we all appreciate that every explosion shatters and disperses matter without any order. However, this huge explosion resulted in the opposite (i.e. it spread matter in an ordered fashion). It acted upon matter in such a way shrouded in mystery, organizing matter to form galaxies.

One of the most significant mysteries of this "Big Bang" is the momentousness of expansion speed which it bequeathed to the universe after the explosion. This is what the renowned British scientist Bill Davis, refers to when he said: "Computations have indicated that the rate of expansion of the universe is of extreme significance. If the universe expanded at a rate just a little slower than its present speed, then the universe would collapse inward due to the strength of gravitational attraction. And if the rate of expansion were to be just a little greater than its actual speed, then the matter of the universe would have been dispersed and the universe shattered. Were the speed



of the expansion to differ from its known speed by one in 10^{10} parts then it would have being sufficient to breach the necessary equilibrium. Therefore, the 'Big Bang' was not a normal explosion but rather an extremely well-calculated and organized activity in all spheres."

What can we derive from all these comments and scientific facts? There is a veritable and indisputable conclusion to reach these evidences: "It is really difficult to deny that an intelligent reasonable power originated this universe which depends (for stability) on well-determined perceptible computations. Definitely the extreme variations in observable numerical values (of various parameters) and of things related to the equilibrium of the universe is a very strong evidence for the existence of a design for the scope of the universe."

As for the physicist, Steven Hawking, when discussing in his book *A Brief History of Time* the amazing fineness of the speed of expansion of the universe, the physicist the huge explosion said: "The speed of expansion of the universe is so significant that had it been at the first instant of the explosion less by a fraction of a part in a 10^{10} parts, then the universe would have collapsed upon itself before reaching its present extent."

Therefore, this is the extent of amazing detail involved in the ordering of this 'Big Bang' explosion and the design of its speed.

The final conclusion reached by the American astronomer George Gamow in his book *Symbolic Universe* is: "The more we examine the evidences closely the more we are constantly faced with the realization that there is an intelligent power beyond nature which intervened in the origination of the universe."

قُلْ رَّبُّهُمْ أَلَمْ يَكُنْ شَاقِبَ الْمَرْبِ وَالْأَرْضِ

"Their messengers said: What! Can there be a doubt about Allah, the Creator of the heavens and the Earth? .." (Soorah Ibrahim 14:10)

Al-Muttaqqin, Mujaahid, Al-Sayid



The Great Explosion

Allah says

﴿أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا﴾

"Have not those who disbelieve known that the heavens and the Earth were joined together as one united piece, then We parted them?" (Soorah Al-Anbiya 21:30)

Qura'ni Explanation

Ibn Mundhir said in *Lisan Al-Arab* "Ratqan" = "Ar-Ratqn" (patched

The Taffiqah which commences from the name of taking up the things (the sun & moon's protection) at the Mughal (stations) should actually be stopped shortly

together) this is the opposite of "Al-Fatqn" (to fissure)

Ibn Sayyidhi said: "Ar-Ratqn" means to patch a tear and mend it and "Al-Fatqn" = (to fissure), is its opposite

The understanding of scholars of Tafseer

Imam Ar-Raazi said while explaining Allah's Words

﴿أَوَلَمْ يَرَ الَّذِينَ كَفَرُوا أَنَّ السَّمَوَاتِ وَالْأَرْضَ كَانَتَا رَتْقًا فَفَتَقْنَاهُمَا﴾

"Have not those who disbelieve known that the heavens and the Earth were joined together as one united piece, then we parted them?"

that the "Scholars are divided on what is intended by Ar-Ratqn and Al-Fatqn upon a number of opinions

First: This is the opinion of Al-Hasan, Qatadah, Sa'eed Ibn Jubair and one of Ikrimah's narrations from Ibn 'Abbas, may Allah be pleased with him. The meaning is that both the heaven and Earth were one single contiguous entity, then Allah separated between them and raised the heavens to where it is (now) and left the Earth (in its position)." This opinion necessitates that the creation of the Earth preceded that of the heavens because after separating between them Allah left the Earth in place and then raised the (different) parts of the heavens. Ka'ab said: "Allah created the heavens and the Earth as one contiguous piece, and then He created between them a wind and parted them thereby." Second: This is the opinion of Abu Saleh and Mujahid that the meaning is that "The heavens were raised and made into seven heavens and so also the Earth." Third: This is the opinion of Ibn 'Abbas, Al-Hasan and the majority of the scholars of Tafseer that "The heavens and the Earth were united, homogenous and solid masses, then Allah cleaved the sky with rain and the Earth with plants and trees." This is similar to Allah's statement

﴿وَمَا تَكُنْ مِنَ السَّحَابِ رَتْقًا فَتُمْطِرُ بَرًا وَمَرًّا﴾

"By the sky (having rain clouds) which gives rain, again and again

Ar-Ratqn is the word translated as "parted them" in the Verse.

And the Earth, which splits (with the growth of trees and planets).
(Soorah Ar-Ra'iq 84:11-12).

They preferred this opinion to others because of Allah's statement thereafter

﴿وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ﴾

And We have made from water every living thing. (Soorah Ar-Anbiya 21:30).

This is because they opined that the water must necessarily be in reference to what was mentioned previously (that the sky was split asunder with rain and the Earth with planets and trees) and this is not possible except what we have stated (of interpretation) is correct.

Fourth: This is the opinion of Abu Musa and As-Sa'adani. It is possible that he intended meaning: *Mala Falq* (cleaved) is creation and manifestation as in His statement:

﴿بِأَمْرِ رَبِّكَ يَبْثُغُ وَالْبَاقِيَ﴾

"The (only) Creator of the heaven and the Earth.." (Soorah Yaseed 12:101).

And His statement

﴿قُلْ يَرْبُّكَ رَبُّ السَّمَوَاتِ وَالْأَرْضِ وَالْأَرْضِ كُلِّ شَيْءٍ حَيٍّ﴾

"He said: certainly your Lord is the Lord of the heavens and the Earth. He Who created them."

Thus, He (Allah) informed of its creation by the word *Ar-Falq* and its state before creation as *Ar-Ratq*.

I (i.e. Ar-Razi) then say: The fact of the matter is that nonexistence is defined so it did not have any things of particular attributes or differences relative to others, rather it was like a single thing together and separate so when the realities are allowed to exist and manifest a part

becomes distinguished from the other and separated from others and others. Based on this, it is good to consider *Ar-Ratq* a figurative expression for nonexistence and *Ar-Falq* a figurative expression for existence."

At-Tabari said in his explanation of the Verse: "*Fafalqunahuma*" i.e. we cleaved them asunder and parted them. Scholars differ concerning why Allah cleaved the heavens and the Earth as in *Ar-Ratq* the nature of *Ar-Ratq* and the meaning of *F*.² Some opined that it meant that the heavens and the Earth were a single contiguous place then Allah parted between them as air. This is the opinion of Ibn 'Abbas, A'riasan and Qasabah. Others opined that: Rather, the meaning is that the heavens were a homogeneous undifferentiated entity then Allah cleaved it and made of it seven heavens and similarly the Earth was a single undifferentiated entity and He made seven earths. This has been narrated from Mujahid, Abu Saleh and As-Suddi.

Still, others opined that: Rather, the heavens were fused solid without giving rain, likewise the Earth was fused solid without any plant sprouting then the sky was cleaved with rain and the Earth with plants. This has been narrated from Ikramah. As-Sayid and the Zayid. Abu Ja'afar Al-Tabari said: The most correct of these views is that was as such the heavens and the Earth were fused solid without giving rain or plants and then we cleaved the sky with rain and the Earth with plants. We say this is the most correct because of the indication of Allah's Words:

﴿وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ﴾

"And We have made from water every living thing."

Al-Qurtubi also preferred this explanation in his *Tafseer*

Historical Preamble

It is possible to go back to the first human conceptions of the origin of the universe in the Stone Age i.e. several hundreds of thousands of years ago, when supernatural dominated human imagination and the

development. This intellect, particularly in the ancient Egyptian and Babylonian civilizations. Amongst them, the popular belief was that a link existed between a stationary (non-evolving) universe and the ritual deities which dominated it. Greek and Roman philosophers had created some theories and theories about the phenomenon of the universe while the knowledge of astrology aided the Hindu and Chinese civilizations.

The general characteristics which impressed upon the perceptions of the universe in ancient civilizations was its link with the world of deities and the firm belief in the existence of a fundamental difference between the Earth and the heavens. These did not permit the development of theories about the universe and how it originated. However, after important advancements in field of astronomy in the twentieth century on the platform of the theoretical sciences coupled with the theory of relativity which led to the development of genuine study of the universe, and on platform observations coupled with significant discoveries about the mysterious disappearances were able to formulate a general theory which would incorporate all discovered facts and serve as a precursor to a homogeneous standardized concept explaining the most significant phenomena of the universe including its origin.

In 1927, the Belgian priest George Lemaitre proposed a new picture of the origin of the universe and its development. George Gamow the American physicist (originally of Russian origin) agreed with him and advanced the several concepts developed of the Lemaitre theory.

Important Facts:

In 1927 Lemaitre presented the "Big Bang". In 1964, two scientists Penzias and Wilson, discovered radio waves emanating from all directions of the universe possessing the same physical characteristics at all locations where they were recorded. It was named perturbed light and is light coming from the distance past, a relic of a huge explosion which occurred at the origin of the universe.

In 1969 NASA sent its artificial satellite into space, which sent back three waves. It totally supports the information supporting the Big Bang theory and the conclusion of Penzias and Wilson. In 1989, a Soviet space station sent back information, which supports the "Big Bang" theory.

Scientific Experiments

The issue of the origin of the universe is one which has perplexed philosophers and scientists have postulated several theories. Everything was haphazard. Theories and concepts about the origin of the universe had proliferated before Lemaitre. In

1927 proposed that the universe was initially a huge mass of dense, glowing and hot gaseous material which he called the Universal Egg. Thereafter, due to extreme pressure resulting from high temperatures a huge explosion occurred within this mass. This

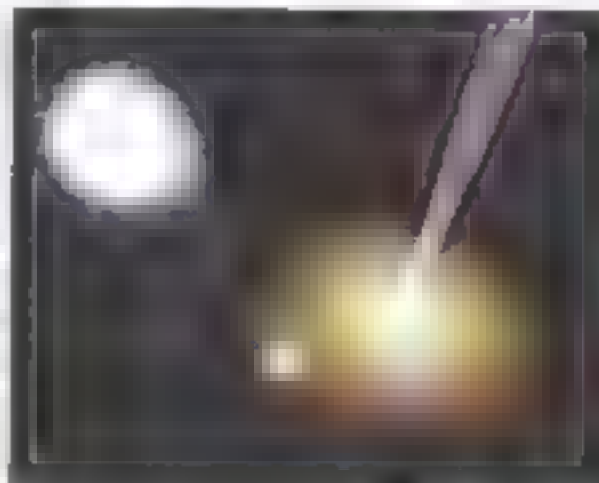


Diagram illustrating the Big Bang theory.

crumbled it and flung it along with its various parts in all direction. Thereafter planets, stars and galaxies formed from it with the passing of time. Some scientists have named this explosion the "Big Bang". According to current computations by astronomers and physicists, the universe has existed for trillions of seconds. Roughly fifteen billion years ago its mass was gigantic and extremely hot and of the size of a ball less than one thousandth ($1/1000$) of a centimeter.

In 1940, the Russian American astronomer, George Gamow, buttressed the Big Bang theory and paved the way for the two scientists Penzias and Wilson in 1964 to detect radio waves emanating

from all directions in the universe and possessing the same physical characteristics at all stations where they were recorded. These waves did not change in characteristics with time or direction. They were, therefore, named *penetrated light* or *light coming from beyond* since past remnants of the huge explosion which took place a few first few seconds after the birth of the universe.

In 1989, NASA sent its artificial satellite, which sent detailed information back to the Earth after three years of possessing the theory. This discovery was added to the discovery of the twentieth century. This scientific fact was mentioned by the Qur'an fourteen centuries ago, where the thirtieth verse of *Soorah Al-Anbiya* says:

﴿أَوَلَمْ يَرَوْا أَنَّا جَعَلْنَا آلَ الْكَافِرِينَ لَآ إِلَهَ إِلَّا أَنَا فَهُمْ لَنَا مُلْكٌ وَمَا لَهُمُ لَنَا مِنْ عَدُوٍّ وَلَا نَصِيرَةٍ﴾

"Have not those who disbelieve known that the heavens and the Earth were joined together as one united piece, Then We parted them?" (*Soorah Al-Anbiya* 21:30)

The meaning of the Verse is that the heavens along with what it contains (galaxies, planets and stars) altogether making up the universe in which we live were originally equivalent to a single contiguous mass. And this is saying *Kun* joined together *كان* or *كان* means together and thereafter a parting and explosion occurred to this mass. (galaxies, planets and stars) formed. This is what astronomers have discovered only at the end of the twentieth century.

Is not this coincidence perplexing to the intellect and making it inquire about the Creator of this universe and its primordial cause? Allah, Most High, says:

﴿إِنَّ الْحَقَّ مِنْ رَبِّكَ لَا تَكْفُرُ مِنَ الْحَقِّ﴾

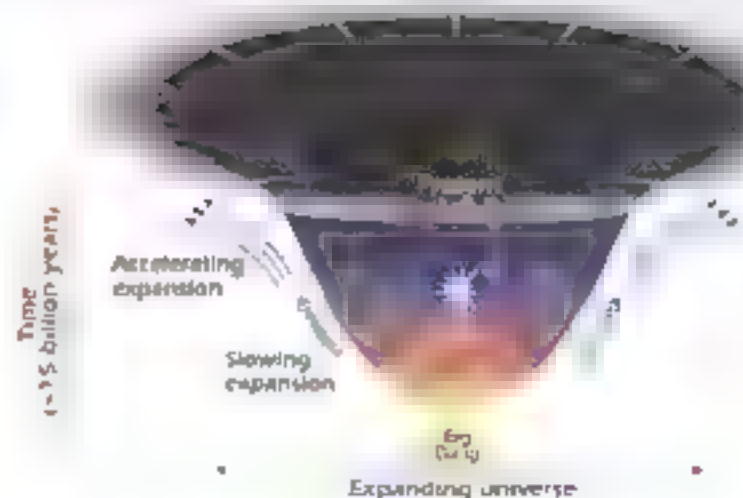
"(This is) the truth from your Lord, so be not of those who doubt." (*Soorah Al-Imran* 3:60).

Scientific References

The *Encyclopedia Britannica* mentions that in 1963, laboratories saddled Penzias and Wilson to study radio waves which muddled

signals of the artificial satellites. They discovered that whatever the direction of the transmitter, it always picks up strong waves with slight muddling even if the sky was clear and conditions suitable for attempting to discriminate the waves from the muddling noise. The two scientists continued to investigate the characteristics of these *radio waves*. The most significant discovery about these space waves was the which proved the "Big Bang" theory to be true. They both won the Nobel Prize for Physics for this discovery in 1978.

The point of wonder is that the Verse affirmed that the universe originated from a huge explosion and it represented a single contiguous mass. This is what extensive study by astronomers and artificial satellite images have only achieved at the tail end of the twentieth century.



Expansion of the Universe

Miraculous Verses

Allah, Most High, says

﴿وَاللَّهُ بِمَا نَعْمَدُ بِالْإِنسَانِ لَاحِقٌ﴾

"With power did We construct the heaven. Verily, We are able to extend the vastness therefore." (Soorah Adh-Dhaariyat 51:47)

Linguistic Explanation

Ibn Mundhir said in *Lisan Al-Arab*:

Ayda: Al-Ayd and Al-Aid all mean power. An example is Allah's statement:

﴿وَلَا تُدْرِكُهُ الْبَصَرُ وَلَا هِوَ كَمَا تُدْرِكُونَ﴾

"and remember our slave Dawood (David) endowed with power" (Soorah Sad 38:17)

That is, he with power *Al-Ta'ayid* is a verbal noun of *Ayyadul-lu*, i.e., strengthened it.

Allah, the most High, says: "when I supported you with *Raah ul Quds (fulcrum)*" i.e., strengthened you. Abu Al-Harith said: *Aada - Ya-ri-du* when it becomes strong and *Ayyada - yuayyidu - yuyyidu* when it becomes one with strength, then *Al-Ayda - al-ayyidu* is a verb strong man. *Al-aasid* con: extension, opposite of narrowness.

And His saying:

﴿وَاللَّهُ بِمَا نَعْمَدُ بِالْإِنسَانِ لَاحِقٌ﴾

"With power did We construct the heaven. Verily, We are able to extend the vastness therefore" (Soorah Adh-Dhaariyat 51:47).

He (Allah) intended to put between it (heaven) and the Earth space.

The understanding of the scholars of *Tafseer*

It is a point of pride (for us, Muslims) to know that the scholars of *Tafseer* and Islamic theology had realized the necessity of the possibility of expansion of the universe. We find in the book *Talafut Al-Talafut* of the Kashi Al-Tafseer discussion of the submissions of Abu Sa'eed Al-Ahazali who speaks from the perspective of Muslim scholars of theology and the refutations of Abu al-Wakeel bin Kashi who speaks from the perspective of philosophers.

Abu Sa'eed Al-Ahazali presented a question, "Was Allah capable of creating a universe bigger than the present one?" If the response is in the negative then this implies an incapacitation of Allah. If the response was in the affirmative then one agrees that there is space beyond the universe where expansion is possible. Allah wishes to increase the size of the universe beyond its present size. As for Ibn Kashi who holds the opinion of Greek philosophers, he posits that increasing the size of the universe or decreasing it from its present size is impossible, because it will be a license which will know no limits (limit to possible available space). Thus the license necessitates an

increase without limit

What is obvious from this discussion is that despite the absence of detailed facts about the physics of the universe and the forces operating within it, the two Muslim theologians while sticking to the fundamentals of Islamic theology derived in the correct manner from the Qur'an, arrived at issues difficult to comprehend, amongst which is the expansion of the universe. This is a recent issue in scientific research in the twentieth century, but this discussion occurred in the sixth century (Christian era)

Ibn Kathir said while explaining Allah's Words

﴿وَمَا يوسِعُونَ﴾

"Verily We are able to extend the vastness of the universe thereof"

i.e. We have expanded its dimensions and raised it without pillars until it became separated as it is (now)

- In 1929 the American astronomer Edwin Hubble observed via a telescope that the galaxies were moving away from each other at tremendous speeds
- The spatial estrangement of the galaxies is a result of the expansion of space (the universe)

Allah, Most High, says

﴿وَاللَّهُ يوسِعُ مَا يَشَاءُ وَيَا قُوسُوتُونَ﴾

"With power did We construct the heaven, Verily, We are able to extend the vastness therefore." (Soorah Adh-Dhahriyat 51-47)

The Verse of the Qur'an points to the fact that the universe, here referred to as heaven, is in a state of constant expansion. However, the Qur'an did not explain the details of the nature of this expansion but

only mentions it summarily. When we return to past scholars of *Tafseer* we find that they dealt with this issue. What does modern Astronomy have to say regarding this issue

In 1929 two astronomers Hamspon and Hubble confirmed the theory of an expanding universe through observation. Then Hubble formulated the principle, popularly known by his name, the principle of the increasing distance of galaxies relative to our galaxy and relatively to each other. This principle enables the compilation of a reasonable estimate of the age of the universe

Hubble had invited Einstein to Germany to show him the increasing spatial estrangement of galaxies and planets using his telescope. The explanation of the phenomena of distancing galaxies is captured by two examples. When there is a source of light in outer space which is moving further away from us, then the light rays weaken and therefore migrate toward red color. But if the source of light is coming closer to us then the recolored migration tends toward blue. The spectral migration becomes perceptible when the speed of motion of the light source is significant when related to the speed of light because it is not possible to observe such for regular relatively slowly moving bodies. This is what physicist Doppler has confirmed

The motion of spatial estrangement



of galaxies is as a result of the expansion of space itself, accompanying, with all galaxies. On a general note, the galaxies, cluster of galaxies and other phenomena of galaxies are considered to be the remnants of a gigantic mass of gaseous material, which has not ceased to expand and spread in the universe since the Big Bang occurred in the original gaseous mass. The Space Encyclopedia has pointed to all these phenomena.

Finally, we say: The agreement of astronomers in the second half of the twentieth century upon the fact that the universe is expanding indicated the basis of the theory of a stationary (non-evolving) eternal universe and proved scientifically that the universe has a beginning and an end. Allah says:

﴿سَرَبْنَاهُمْ يُبَيِّنَنَّ فِي الْأَفْلاكِ دُورَ الْفُتُوحِ عَلَى يَدَيْهِ اللَّهُ الْغَفُورُ
الْعَلِيمُ﴾

"We will show them Our Signs in the Universe, and in their own selves until it becomes manifest to them that this (Qur'an) is the Truth. Is it not sufficient in regard to your Lord that He is a Witness over all things?" (Soorah Fussilat 41:53).

Point of Wonder

The miraculous point of the Verse of the Qur'an is the syntax of "verily we are able to extend the vastness thereof" which implies the past, present and the future indicating that the universe is in a state of continuous expansion. This is what astronomical observations have revealed only in 1929.



Computation of the speed of Light

Meaning Verse:

Allah, Most High, says:

﴿يُدَبِّرُ الْأَمْرَ مِنَ السَّمَاءِ إِلَى الْأَرْضِ ثُمَّ يَرْجِعُهُ إِلَى يَوْمِ الْقِيَامَةِ﴾

"He arranges (every) affair from the heavens to the Earth, that it (affair) will go up to Him, in one Day, the space whereof is a thousand of years of your reckoning (i.e. reckoning of our present world time)." Soorah Al-Sajda 32:5.

The understanding of the scholars of Tafseer

'Abdullah Ibn 'Abbas, may Allah be pleased with him, said in his explanation of the Verse "This is in this world: A speed by which it travels the distance of a thousand years in just one of your days." (See Al-Tabari, Al-Qurtubi and Az-Zamakhshari)

Qatadah said: "The length of its journey that day is a thousand years." (Al-Tabari mentioned it in his Tafseer).

Al-Qurtubi said: "Meaning in a day the length of which is a continuous journey of a thousand years." Abu Hayyan mentioned in his Tafseer that: "The year is based upon the revolution of the moon. A day is reckoned as a year of the statement of Allah Most High "(of your reckoning)" i.e. (reckoning) of the believers.

Al-Qurtubi said: i.e. "of what you estimate"

Historical Preamble

In 1676, Claus Roemer advanced the first evidence in history that the speed of light is not perceptible. Attempts at measurement continued for another three centuries until it became dependable in 1983 in Paris when an international conference set the speed of light at a vacuum at a value of 299792.485 kilometers per second.

Scientific Facts

- Resulting from the proceedings of the International Conference on Measurement and Standards held in Paris in 1983, the speed of light in vacuum is computed to be 299792.458 kilometer per second.
- The speed of light is the same for all electromagnetic waves and this serves as the upper limit of speed in the physical universe.
- The speed of all celestial bodies is relative and depends on the motion of the observer and therefore requires specification. However, the speed of light is non-relative and has an established universal value.
- The length of distance of a month which we reckon (i.e. lunar constellation) is 2152612.264 kilometers.
- The length of distance of one thousand years is 25.8314723



billion kilometers.

- The lunar year is based upon the motion of the moon around the Earth.
- The ordinary distance of the moon travels around the Earth in every month (the length of the lunar orbit) is 2152612.264 kilometers.
- The average speed of the moon is 86164.9966 kilometers per second.
- A stellar month is 27 32166 days.
- The length of the coverage is 2413306.35 kilometers relative to the vehicle speed (its cosine) is 0.89157.

Note: The computation of average orbital speed of the moon is made as though the Earth were stationary which means multiplying the average orbital speed of the moon around a moving Earth by the cosine of the central angle which the Earth traverses around the sun in a single lunar month.

Scientific Explanation

In 1676, the astronomer Claus Roemer presented evidence that the speed of light is not perceptible as mentioned in the Qur'an. Thereafter, estimation continued until it was established in Paris in 1983 during an International Conference on Measurement and Standards. The speed of light in a vacuum was established as 299792.458 kilometers per second. This is what scientists have arrived at, at the end of the twentieth century as mentioned in the *Encyclopedia Britannica*.

When we return to the Noble Qur'an, we find that it has given appropriate information which affirms the correctness of what the measurement and standards conference concluded in 1983 in Paris.

The discoverer this time around was one of the Muslim scholars specialized in physics – Dr. Muhammad Daraduh, a consultant to the Scientific Wonder Council. He derived from the Words of Allah in *Surah As-Saduh*, Verse 5:

﴿يَهْدِي الْأَمْرَ إِلَى الْحَقِّ بِإِذْنِ رَبِّكَ إِنَّكَ إِلَى حَسْبِكَ مُنْقَلِبُ﴾

"He arranges (every) affair from the heavens to the Earth, that it

affair) will go up to Him, in one day, the space whereof is a thousand of years of your reckoning (i.e. reckoning of our present world time)."
 'Soorah As-Sajda 32:5

He did not say that the affairs of the universe are the affairs of the physical universe regarding our existence in this world. This has also been mentioned before him by the interpreter of the Qur'an, the famous Companion (of the Prophet), 'Abdullah Ibn 'Abbas, may Allah be pleased with him. It has been narrated from him in his *Tafseer* of "the affair" mentioned in the Verse that he said:

This is in this world, a speed by which if (matters of the universe) travels the distance of a thousand years in just one of your days." As for that regarding His statement "if your reckoning", Abu Hayyan At-Tawhid said in his *Tafseer*: "The year is based upon the movement of the moon." The meaning of this is that Arabs referenced time to the lunar counting just as they used to reference distances to the time of its traverse, for example saying, "A journey of three days." The Qur'an was revealed in the language of the Arabs and He (Allah) said: "if your reckoning."

Based upon what has preceded, if we know that the speed of a body is $\text{traversed distance} \div \text{time}$ and we recognize the concordance between the approximation of science and that of the Qur'an, then we have the following:

| Scientific Proportion (Equations) | Qur'an Proportion (Equations) |
|-----------------------------------|---|
| Time | In a day (whose length thereof (time of an earthly day)) |
| Distance | One thousand years of year reckoning (by lunar counting or calculation) (12000 cycles) |
| Speed (Distance/Time) | After the universe (one thousand years of your reckoning) (12000 lunar cycles) / time of an earthly day |



By substituting figures into the equation (see *Al-Haqiqah Al-Ilmiah li-Tafseer Al-Aqqam*). The physical speed of the affairs of the universe:

♦ This value of the speed of the affair of the universe agrees perfectly with the speed of light announced at the International Conference in 1984 in Paris.

The astonishing results of this research have been presented to specialists in Physics at the Faculty of Science at King Abdul-Aziz University in the Kingdom of Saudi Arabia. They concurred with it from a scientific viewpoint. This was also approved from the linguistic and *Tafseer* viewpoint from a section of Umm Al-Qura University Department of Language and *Tafseer* in Makkah. Therefore it obtains approval from all quarters.

Thus Noble Qur'an confirms the most important principle known to man in the twentieth century: Is this not a miraculous scientific precedence mentioned by the Noble Qur'an?

﴿قُلْ هِيَ الْحَقُّ﴾

Say "Yes! By my Lord! It is the very truth!" (Soorah Yunus 10:53)

Alah, Most High, also says

﴿لِكُلِّ شَيْءٍ عِندَ رَبِّهِ أَجَلٌ﴾

"For every news there is a fact, i.e., for everything there is an appointed term." (Soorah Al-An'am 6:67)

He also said

﴿وَبَرِّىْ سَبِّحُوْهُ ثَمَّ تَلْعَنُ الدُّوْا اُتْلُوْهُ اَلْحَقُّ مِنْ رَبِّكَ فَاَنْتُمْ لِنَصْرَتِىْ اِلَى يَوْمِ اَلْمَعِيْدِ﴾

"And those who have been give knowledge see that what is revealed to you (O Muhammad) from your Lord is the truth, and guides to the path of the Exalted In Might, Owner of all praise" (Soorah Saba 34:5).

Miraculous Point

The miraculous point in the verses of the Noble Qur'an is that it defined the revolutionary motion of universe, speed in a vacuum is equivalent to the revolution of the moon around its orbit twelve thousand times. Therefore, Dr. Muhammad Daudah derived the estimation of the correct speed of the divine affair. Daudah found that the Qur'an's value coincided exactly with value of the speed of light announced by the international Conference on measurement and Standard in Paris in 1983 which is 299792458 kilometers per second.



All Float Around In Orbit

One of the characteristics of the universe is that every component and all parts of these components are in motion—not those not greater than an atom are all in continuous motion, never stopping, except by the command of Allah, the Creator of the heavens, the Earth and that is between them. He is its sustainer. This motion is not governed by a scientific law, but it is caused emanating from the nature of matter as a cosmic phenomenon. Rather these are motions legislated and ordered by Divine Wisdom. It is a phenomenon which violates all principles formulated by man which he has studied and discovered in his earthly environment.

Every planet, cluster of stars and planets, and galaxies all rotate around, upon the axes and revolve in their orbits in a translocational motion. Certainly, the entire universe is in translocational motion around a remote center beyond human imagination. Conventional science knows neither the nature, value, or this center. Though a man

has been able to unravel some of the principles behind the motion and dynamics of bodies upon the ground, we cannot achieve more of the secrets regarding the motion of celestial planets, galaxies, stars and comets. He does not cease to strive in his attempt at denoting the causes and course of their motion and speed.

Even those phenomena which man observes upon the surface of the Earth and assumes to be stationary such as mountains, hills and seas, are actually in continuous motion coupled with the various motions of the Earth: axial rotation and translational orbital motion, and its other motion along with the Solar System. These systematic continuous motions which know no weariness, fatigue, nor intermission for everybody in this expansive universe are still to be understood. This is nothing but glorification and submission to Allah, the Exalted and Able, Fashioner of the heavens, the Earth and all between them. This is because everything in the universe is subservient to the command of Allah, Magnificent and High is He. Everything submits to Him in the service of mankind to make easy his survival upon the Earth's surface. Allah says:

﴿لَا تَسْبِقُ فِي هَٰذَا السَّيِّدَةِ الْقَمَرَ وَلَا يَسْبِقُ فِي عِلِّيِّهِ الشَّمْسُ﴾

"It is not for the sun to overtake the moon, nor does the night outstrip the day: they all float, each in an orbit." (Soorah Ya Seen 36:40)

He also says:

﴿وَمَنْ أَلْمَزَ خَلْقَ النَّجْمِ وَالْقَمَرِ وَالشَّمْسِ وَالْقَمَرِ﴾

"And He it is who has created the night and the day, and the sun and the moon, each in an orbit floating." (Soorah Anbiya 21:33)

Resulting from the orbital rotation of stars and planets is a centrifugal force which tends to preserve the stars and the planets within their orbit at fixed distances from it to the mother star (in the case of our Solar System, the sun). The factors that determine the continuous link of stars and planets to each other are as follows:

- ♦ The mass of the sun.
- ♦ Axial rotation of the sun.

- ♦ Gravitational force of the sun.
 - ♦ Mass of each planet associated with the sun.
 - ♦ The continuous axial rotation of each planet at definite speed.
- The centrifugal force of each planet and the intervening distance between the sun and each planet.

Despite the number of these factors and the great length of time for which they have operated (from the origin of the universe till date) estimated at billions of years, the sun, stars and planets have maintained their fixed courses. Neither defect nor error have they experienced in their motion paths. This is because in reversing their motion they are subservient to the command of Allah, the Exalted and Sublime. They are not subservient to coincidence or arbitrariness. Any disturbance occurring to any of these celestial bodies which may lead to the severing of the binding force between a star and its planets, resulting in their explosion and shattering does not occur except by the command of Allah, Glorious is He and Most High. The Creator Who fashioned and created it. This was the day the Day of Resurrection, the day when the universe will lose all its inhabitants and planets, stars and moons will be shattered by Allah's command, and the Earth will experience the promised violent convulsion and its buried dense material will come to the surface. Once it loses equilibrium, its gravitational force and its position within the universe. Due to the axial rotation of the sun, its gases concentrate (at its center) and begin to form nuclei within it.

A tremendously strong gravitational force arises due to the enormous size of its mass which is about three hundred and thirty times the sun (i.e. 330 times that of the Earth). It is by its gravitational force that the planets follow up and traps them within its orbit forming what is known as a Solar System. Solar radiation spreads out the further due to extreme energy emanating from the nuclear reaction at the interior of the sun. Solar energy originates from the darkness of vacuum and forms the regular atoms and molecules. The continuity of the axial rotation of the sun the formation of solar energy would have ceased and not be renewed over time. Then the sun would have become a dead star several billions of years ago. It would have lost its gravitational force and as a result between the sun and its planets

in space would have been broken

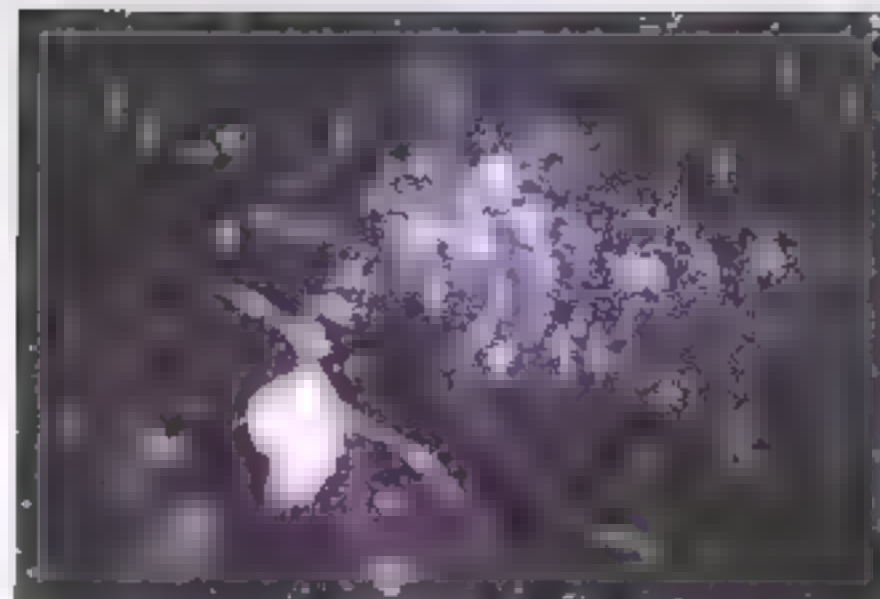
These bonds between planet and stars which preserve their spatial positions in space and their orbits is what Allah, the Protector, the Mighty and Sublime, talked about

﴿وَالَّذِينَ يَذْكُرُونَ مَوَاقِدَ السَّاعَةِ﴾

So swear by Mawade (setting of the mansion, etc. of the stars (they traverse). And verily that is indeed a great oath, if you but know" (Soorah Al-Waqiah 56:75-76).

Man, in his study of the spatial positions of the stars and the signs of Allah in the universe, alludes to the existence of a miraculous equilibrium between them. He alludes that the sizes of these stars and planets, the densities, the gaseous and mineralogical composition, their mass, energy and speed of orbit, and the tremendous and vast intervening distances between them are the result of the miraculous order, ordered (of course) by Allah the Blessed, the Exalted, the Wise as a miraculous sign for all mankind till the day of judgment

▲ Mujib-ur-Rasheed



The Giant strings Theory

The heaven beautified by the Creator with lamps (i.e. stars, planets and galaxies) is only the Earthly heaven (first of the seven heavens) which we see from any position. Allah, the most High, says:

﴿وَجَعَلْنَا سَمَكَاتُهَا كَالْمِصَابِقِ وَالْقَوَارِعَ ظُفُوفًا مَّحْبُورًا﴾

"And indeed We have adorned the nearest heaven with lamps and We have made such lamps (as) missiles to the drive away the Shaitan (devils), and have prepared for them the torment of the blazing fire (Soorah Al-Mulk 67:5)

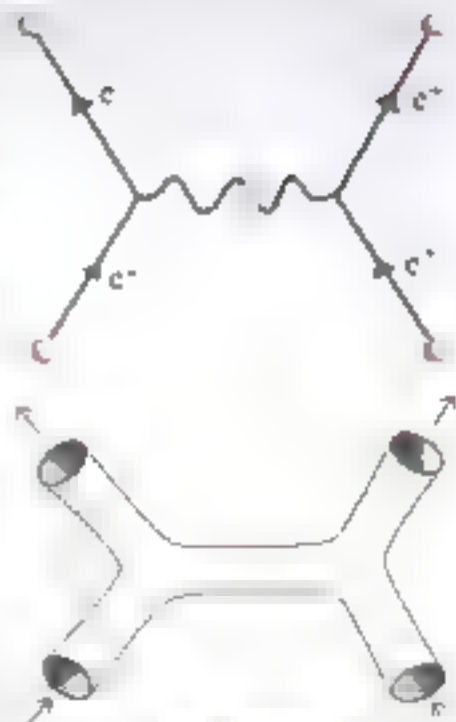
If you are on the Earth's surface or within the Solar System or a galaxy, or outside it, you would observe it (the heaven) in different shapes and colors, though it is the same heaven (containing the same set of planets, stars and galaxies). The next Verse supports this

at speeds close to that of light otherwise our desire to reach our goal would wane before reaching the closest star to us. This is due to the enormous distance separating stars and galaxies.

We do not know of a limit to the universe, so how can we go beyond the universe if it has no end? Is there anything known as the velocity of escape from the universe similar to the escape velocity from the Earth's gravitation? What is the value of this speed? Science as of today is yet unable to answer our question and may not be able to answer them for a very long time to come.

Thus it is evident that going beyond the limits of the heavens (seven heavens) is virtually impossible. All that is left is the possibility of visually observing its limit with the aid of instruments, i.e. viewing the farthest parts of the universe while he is resting and recreating on his earth and enjoying the warmth of his planet.

As of today, despite the strength of instruments invented by man, he has not been able to reach the farthest parts of the universe. He at best has gone to observe the radiations which fill the entire universe and emanate from all directions. It is possible that these radiations are one of the signs of the limit of the universe (farthest heaven), however, we still do not know of any beginning or end of the Super String universe. The Super String theory proposes that fundamental particles are made of components which are elongated and are not particles which occupy the extent of a point element in



space, similarly to the theory of particles.

These elongated components appear as though they are delicate endless strings that may possess ends and are referred to as open strings. They could also close upon themselves forming closed rings. The motion of this string in space or its temporal effect is one which presents a novel surface, i.e. a regular surface when the string is a closed one. These surfaces are referred to as surfaces of the universe. These string strings possess another peculiarity: it is possible to join together the components of a single string. For example, it is possible for a string to split off and divide to form two strings and the motion of particles could be likened to waves which move through the entire length of the string. Likewise, the fusion and division of bodies can be likened to the joining and joining of a string. As an example I know, the gravitational force between the earth and the sun can be explained in this way as the emanation of the gravitation from the sun into twining with other particles in the earth in the shape of a string. The principal parts of this resemble the strings and particles in the Earth and the sun. The horizontal part of the 'E' shaped represents the path of the gravitation between them. We may now ask: "What is the relationship between the super string theory and the seven heavens?" The answer is "In a particularly extraordinary way, the mathematical solution regarding this theory of super strings requires the existence of ten dimensions. We all know that if we travel forward and backward, that represents one dimension, when we move right and left, that is the second dimension and when we move up and down, we have a third dimension. Any shape e.g. a car or house can be described by these three dimensions: length, area and height. After the discovery of the theory of relativity, a fourth dimension was added to these three spatial dimensions. This means that in our existence in this universe under the earth, we are in four dimensions: three spatial dimensions and a fourth temporal dimension. So where are the remaining six dimensions?"

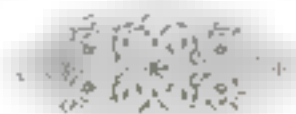
Physicists are perplexed and unable to answer this question. They have proposed an answer to this question which says: "The remaining

six dimensions are wrapped within these strings (super strings) in a domain whose size is less than 10^{-60} of a millimeter. The result of this extreme minuteness is that we neither see nor notice these dimensions. However, to date, no proof of this proposal has come to the surface. Why are these six dimensions folded into extremely narrow domains while the other four are not? Is it possible to have another explanation? Rather than being extremely minute, it is possible that they are extremely large or they exist outside the universe or the earthly heaven. In this case (due to their extremely large size) we would also not see them because they are beyond our universe.

The number of heavens above our earthly heaven is six, and the number of the remaining dimensions which physicists are searching for is six. Is it possible for every heaven above our earthly heaven represents each of these dimensions? Fortunately, the mathematical solution permits the repetition of a dimension or more in other universes.

It is possible that we notice the time factor in these heavens and we may not. It is also possible that only one or more spatial dimensions exist in each of these universes. If the factor of time vanishes in any of these universes or in all of them, then life within them becomes eternal and unending. Also, if any of the spatial dimensions vanishes in these universes, then life becomes impossible therein for beings of our shape (i.e. three-dimensional). It then becomes mandatory that we transform into flat planar beings which can exist in a two-dimensional space or into beings like flying arrows which only move in one dimension (for example rays of light). These assumptions and proposals if they lead us only to science fiction. However, the hypothesis that the six dimensions exist beyond our earthly heaven is not more fictitious than that super strings. And Allah, the Exalted, knows best.

Dr. Mushtaq Ahmad, 11/1/2014



Trapping Wind

Changing non-living thing to life
from using radiation

Dr. Mushtaq Ahmad,
Professor of Space Science and Technology

What is life? What are the conditions which lead to its emergence? Where do these conditions exist? Do these conditions continue to abound? What is the assumed theoretical estimate for the origination of life? From where did the first life form originate? Or did it evolve at different places in the universe each one in a distinct form?

These were the questions which preoccupied

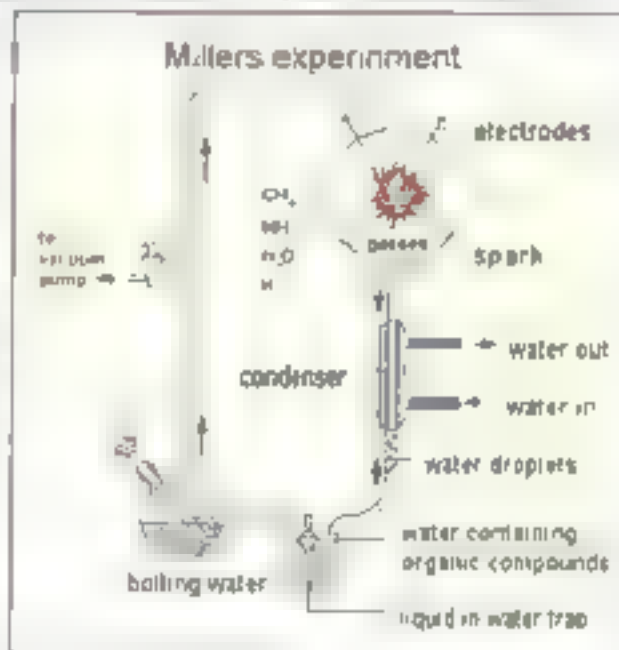


the minds of biologists in the West at the onset of the 20th century. This is the conclusion of the belief that life originated by chance in the transformation of non-living matter to living beings without the intervention of any supernatural power. For which scientists a formula to establish proof.

In 1928, two German scientists Sarrat and Zevaloff attempted to perform an experiment with the goal of turning non-living matter (living matter by focusing radiation beyond the ultraviolet range upon a mixture of gases consisting of two different gases, carbon dioxide and water vapor). After a while they observed the formation of formalin and glucose two components strongly linked to the living system.

In 1953, the American scientist Miller performed a similar experiment. In his experiment, he imitated a situation in the Earth's atmospheric envelope at the onset of its formation, i.e. as it was billions of years ago by mixing water vapor with ammonia, methane and hydrogen. He placed the mixture in a closed vessel, and then he exposed the vessel to a continuous discharge of electric charges. He reported lightning sparks such

as those occurring in the Earth's atmospheric envelope. After a week the experiment commenced. Miller found amino acids at the bottom of the vessel. Subsequently, several scientists performed similar experiments and succeeded in converting the amino acids to form large protein



molecules (i.e. components not found except in living things).

The German scientist and Nobel laureate Manfred Eigen established the principal conditions for experimentation which resulted in estimations of the probability of the origination of proteins under any specific set of conditions and from there, to the possibility of the emergence of a live cell in the first stage of its formation. Eigen found that the probability of building even a simple without a living organism represents a strong difficulty, meaning that the possibility of existence of the necessary factors for existing life by chance is so small that it can not even be imagined.

In 1972, the German scientist, Kaplan, described the probability of combination of necessary proteins for the formation of life by chance as being so weak that it cannot be imagined. For example, if there is a chain made of one hundred rings (amino acids), the probability as postulated by Kaplan is not greater than 1 in 10¹⁰⁰ parts. If we know that the number of atoms in the entire universe, do not exceed 10⁷⁹, then we appreciate the minuteness of the probability of life originating anywhere in the universe by chance.

Based on the computational estimates by Kaplan, two British astronomers and specialists in the matter intervening between stars, Sir Fred Hoyle and his colleague, Chandra Wickramasinghe, proclaimed that the probability of life originating by chance is an extremely difficult thing such that it is not possible to imagine as small as the Earth. The relatively young age of the Earth (roughly 4.5 billion years) compared to the age of the universe which exceeds 14 billion years, is insufficient for the probability of origination of life by chance. They assumed the entire universe to be the experimental domain for changing non-living matter to life spontaneously. The result is the same as that arrived at by Kaplan, and that is that the probability of life originating by chance by transformation of non-living matter to life, is extremely minute and can hardly be imagined. They eventually agreed that there must necessarily exist a great supernatural power behind the origination of life in the universe. This great supernatural power

is Allah, Glorious is He and most High, the Only Deity. One without associate in dominion, without parent or child. Allah said in His Noble Book:

﴿وَسْئَلُكَ عَنِ الرُّوحِ قُلِ الرُّوحُ مِنْ أَمْرِ رَبِّي وَمَا أُوتِيتُمْ مِنْ آيَاتٍ إِلَّا بَلَدًا﴾

"And they ask you (O Muhammad) concerning the Rooh (the Spirit), say: The Rooh: it is one of the things, the knowledge of which is only with my Lord. And of Knowledge, you (mankind) have been given only a little" (Soorah Al-Isra 17:85).

Evolution from Space

Based upon this (the aforementioned conclusions), the two German scientists published their book titled *Life from Space* in 1968. It was translated into Arabic in 1989 under the titled "Al-Baitur Al-Akhar" (The Last House). This book attempts a new examination of the theory of evolution from space proposed by the Swedish scientist Arrhenius in 1907. This book refutes the theory of organic evolution proposed by Charles Darwin during the nineteenth century. It states that the development of living systems on Earth was a subject of the effect of factors from the universe and that the complexity of life systems points towards gradualism in the last quarter of the twentieth century, and a great Power such as Allah, the Glorified and Exalted, by establishing that the nature of the biological complexes in life forms were actually in existence at the time of formation of the oldest rocks on the surface of the Earth.

Therefore, the oldest evidence, which dates back to remote times contain no indication of how the first components of life formed. Thus the theory of evolution lacks scientific bases according to the opinion of Hoyle and his colleague. Also, life had evolved to a known level in space prior to the formation of a Earth over a long period of time. 'Life in space'.

In the eighties, it became clear that matter in the universe beyond our Solar System contained a lot of organic particles, often with high complexities. This is why bio-astronomists concentrated their efforts on

researching for the location or locations of origination of life. They looked at places within the universe where temperatures are between minus twenty-five (-25 °C) degrees to sixty (60°C) degrees and in which the atmosphere is free from oxygen or very deficient thereof. They found that the presence of water or water vapor at any location in the universe is the singular most important condition for the emergence of life. Allah, the Magnificent, says:

﴿وَجَعَلْنَا مِنَ الْمَاءِ كُلَّ شَيْءٍ حَيٍّ﴾

"And We have made from water every living thing." Soorah An-Naba 31.

And

﴿وَنُفِثْنَا مِنْ نَارٍ سَمَوِيَّةٍ﴾

"Allah has created every moving (living) creature from water." (Soorah Noor 24:45).

Life scientists believed that the volcanoes of the Earth emitted first gases about four billion years ago containing water vapor which condensed above the Earth's surface forming the primordial broth. Then particles of carbonic compounds formed and continued to increase in complexity.

The theory of life originating from comets has been known for several years when presently becoming acceptable and it has its own valid arguments. This made scientists admit that the origin of life was from space possibly through comets which hit the Earth in the past and supplied it with water. Comets are regarded as mountains of ice which contain cosmic carbon compounds. The dominant theory amongst bio-astronomists today is that life and water originated from space via comets. Allah, the Magnificent, says:



﴿وَأَرْسَلْنَا سَاقِطًا مِّنَ السَّمَاءِ﴾

And We send down pure water from the sky. (Soorah Al-Furqan 25:48)

The famous Halley's comet has visited us twice in the twentieth century, first in 1910 and then in 1986. It visits us every seventy-six years from the fringe of the Solar System. German scientists working in an important ring with their space satellite were noted in 1986 the presence of molecules of cyanides of hydrogen in the core of Halley's comet. Its concentration corresponded to that of cosmic matter, between stars. This was why the study of Halley's comet at close proximity in 1986 was of great significance at the American Observatory for the Study of Infrared.

Radiation in Hawaii. Studies indicate the presence of methane, ethane, acetylene, alcohol, formaldehyde and hydrogen cyanide in the comet. Scientists also discovered carbonic acids using radio waves. This suggested the possibility of the presence of amino acids, which is the major building material of life and proteins. This is because this acid reacts with hydrogen making it to form amino acids particularly glycine which is considered the simplest form of an amino acid. This concurs with scientific facts about the universe discovered recently in the age of increasing into space and one of the significant things on the books of the twentieth and 21st century. Qur'an Allah, the Magnificent says:

﴿قُلْ أَزَلَّةٌ أَلْوِي يَتْلُمُ كَيْفُ فِي السَّمُوتِ وَالْأَرْضِ﴾

"Say! 'It (this Qur'an) has been down by Him (Allah, the real Lord of heavens and Earth) Who knows the secrets of the heavens and the Earth,' (Soorah Al-Furqan 25:6)



A Lawar Kunnass The Receding Planets

Allah, the Exalted, says

﴿وَالَّذِينَ يَذْكُرُونَ
الْكَوْكَبَاطَ﴾

'So verily I swear by the planets that recede and disappear during the day and appear during the night'. And by the planets that move swiftly and hide themselves. (Soorah At-Takweer 81: 15-16)

Allah Glorious is He, swears – and He need not swear to His servants – by a fact not known to scientists except a few years ago. The

phenomenon of Black Holes. These are gigantic stars which concentrate naturally at the centers of galaxies and are regarded a heavy center for the galaxies. They are composed of extremely dense material (the density of which) the human intellect can hardly imagine. Matter is crammed in these black holes such that the distance between the components of the atoms, most of which is empty space vanishes. The size of the matter within it is extremely minute. When the spaces between the fundamental components of the atoms vanish, its size becomes extremely minute till it is virtually non-existent. With the cramming of the matter within the gigantic star, its gravitational pull becomes unimaginable such that even light cannot escape therefrom. Then, the star and the heavy core of the galaxy become the larger part of the galaxy's mass. This is because everybody within the galaxy is held by the gravity of the black hole as a heavy core for it.

In order for a Black Hole to form, its mass must be pressurized and it is in equilibrium with the universal speed or the speed of light. As an example, a star the size of the sun that measures in diameter one million, three hundred and twenty-two thousand kilometers requires to be pressurized and squeezed to a diameter of only three kilometers in order to form a Black Hole.

As for *Al-Jawar Kunnass* linguistically it means *Kunnass* also meaning concealed or hidden. But why the repetition here? What is its meaning since it is not for affirmation (of what was in the previous verse)? This is why I believe that its meaning here (in this Verse) is from *Al-Kann*, i.e., one which sweeps through the plane of the sky and not one which hides.

From *Ayat Al-Imaz fi Al-Qur'an Al-karim* –Dr. Zaghoul An-Najjar, see Black Hole, page 262)



The Milky Way Our Galaxy

Allah, Most High, says:

﴿يَوْمَ يَهْرَى الْأُنُفُيُ لِلْأَسْفَلِ وَالْأَسْفَلُ لِلْأَعْلَى كَذَلِكَ نُمِيزُ الْفَسَادَ مِنَ الْإِحْسَانِ وَالْجَنَّةُ هِيَ الْآخِرَةُ لَ الَّذِينَ كَانُوا يَصِلُونَ إِلَى اللَّهِ لَا يَصِلُونَ إِلَيْهِ إِلَّا بِإِذْنِهِ يَوْمَ يُنْفَخُ الْأَشْفَادُ مِنَ عُنُقِهِمْ وَتُوسَّدُ الْأُنُفُ فِي الْأَشْفَادِ فَتُخَدِّلُونَ فِيهَا وَلَوْ أَنَّ لَكُمْ فَاهُ غَدِيرٍ مُدَّةً وَأَنْتُمْ لَا تُخَدِّلُونَ﴾

"And (remember) the day when We shall roll up the heavens like a scroll rolled up for books, as We began the first creation, We shall repeat it, (it is) a promise binding upon us. Truly We shall do it" (Soorah Anbiya 21:104).

This is a Verse which recounts to our ears and intellect the issue of the beginning of creation and its end, the importance of our existence and the existence of the entire universe. The general orders and laws are

obtain here regarding the origin of creation is the origin of the universe with all that it contains. Things which we see with our eyes such as galaxies and those we do not see, not even with the most powerful telescopes and microscopes, those things we know or have access to via logic and computation and those which we still know not (despite logic and computation), which still remain mysteries of the beginning of creation which we comprehend from the Verse.

﴿يَوْمَ تَوَدَّى الْكَافِرُ الْكَافِرَتَيْنِ كَفِيفًا﴾ - فَتَسْتَبِيدُ وَهِيَ مُلَبَّاةٌ بِأَمْرِ رَبِّكَ ﴿فَتَقَبَّلَهَا فَكَبَّلَهُمَا﴾

And (remember) the day when We shall roll up the heavens like a scroll rolled up for books, as We began the first creation, We shall repeat it. It is a promise binding upon us. Truly We shall do it." (Soorah Ar-Ra'ya' 21: 104).

This universe whose dimension is over twenty billion light years and whose mass is greater than 10^{50} kilograms will appear in the Hand of its Creator as the pages of a book appear in the hand of a reader!



Initially, this is a matter of a scroll requiring but a pause to contemplate and think about it.

First, this is first, that no matter how much the universe expands and its volume proliferates and its weight increases, it will never be too big or uncontrollable for its Creator, Allah. He shall roll it up without disturbing the order of a scroll—just as it is on its page. (Allah, the Honored, reaffirms this fact to us in another verse wherein He said, "Verily that is easy for Allah," Allah says:

﴿وَمَا سَرَّ أَحَدًا شَيْئًا أَنْ يُبَدِّلَهُ فِي تِلْكَ آيَاتِهِ﴾

"See you not how Allah originates creation, then repeats it. Verily, that is easy for Allah." (Soorah Al-Ankaboot 29:19).

And in another Verse

﴿وَهُوَ الَّذِي يَخْلُقُ السَّحَابَ مِثْلَهُ وَهُوَ غَوِيٌّ بِهِ السَّيْلُ مِنَ الْغَوِيِّينَ وَالْأَرْضِ وَهُوَ أَتَقَرُّنَ الْغَيْبِ﴾

"And He it is who originates the creation, then will repeat it (after it has been perished), and this is easier for Him. His is the highest description in the heaven and in the Earth. And He is the Almighty, the All-Wise." (Soorah Ra'ad 30:27).

Secondly, He presents us with a similitude of the universe being similar to a page. It is possible for the universe to actually be flat; this is the situation between two conclusions, between a closed universe and an open one when the density of the universe is equal everywhere. This is what a great number of astronomers have affirmed. It may also appear to us as a matter, though it really is not, as a result of enormous size and volume just as the Earth initially appeared flat. It is substantially prior to being aware that it was spherical. Here we see the extent of similarity of the universe to the page of a scroll: a flatness which we see from all angles such that we actually think it is flat as the flatness of pages.

Thirdly, he calls our attention to the issue of the shrinking of the universe and its inward collapse as a similitude to the rolling up of pages

of a scroll. The marvel of this similitude is extraordinary: a description that could not have emanated except from the one All-Wise All-knowing, All-merciful Who created the universe. After the expansion of the universe to its present size or to any future size, the Creator shall roll it up along with all its contents and this huge and expansive universe shall return to its primordial state. As though we were viewing a film of the expansion of the universe in rewind mode, we observe its stars condensing, galaxies coming together and by galaxies quizzical together and its size diminishing and the universe rolling up to its primordial state.

Thereafter (in the first Verse) comes a reaffirmation that this was new creation commenced and so shall it return to its original state.

﴿كَذَٰلِكَ بَدَأْنَا أَوَّلَ خَلْقٍ ثُمَّ عَرَضْنَا إِلَيْكَ مَا خَلَقْنَا يُفَهِمُكَ﴾

"As We began the first creation, We shall repeat it, (it is) a promise binding upon Us. Truly We shall do it." (Soorah An-Na'as 21:104).

This was the decision of the Creator before the origin of the universe, and it was also our return to its original state—nothing more than a point with infinite density, a temperature, or a something known only to Him.

The process of shrinkage and inward collapse of the universe upon itself, a tremendous collapse to a primordial point, is the closest explanation which science can presently offer for the rolling up of the universe or the heavens to its primordial state. In addition, there are some observations we need to make.

First: The scientific or human interpretation of the process of the shrinkage, followed by the tremendous inward collapse (of the universe), the reverse of what man sees or pictures, is this enormous phenomenon in regards to force and violence whose force and energy are extraordinary. Man is a creature above this planet (Earth) which is one of the planets trading in sun, a sun as one of the million of stars on the wings of a galaxy, and a galaxy just one of the billion galaxies in the universe. It is not possible for man to describe

For God it has an verse and it is entirely from another viewpoint. We observe his expression of his power in the rolling up of the heavens. The universe is a labor (and easy) endeavor which the strength of the Power can create and comprehend. The end of the entire universe refers to Him (the Creator) is nothing more than the labor of easy and trivial endeavors which we perform daily such as rolling up a few pages. It poses no difficulty to the Creator just as rolling up pages poses no difficulty to us.

Secondly: The scientific explanation of the end of the universe as a process of shrinkage and collapse assist in understanding the verse the explanation of the rolling up of the heaven and the return of the universe to its origin state. Furthermore, we find a great coincidence with the text of the Quran. This does not imply that this is the only possible explanation of the Verse. The Divine rolling up the universe could be in the form of a shrinkage process and a collapse, or could happen in another form we know of or which we do not know of. So is the length of time of the rolling up process, it is possible that this is the same length of time which the shrinkage and collapse process would take or the length of time it took to expand the universe, i.e. roughly fifteen billion years. I may also be forgetful that it is shorter and I may occur in less than a second.

Allah, the Exalted, says:

وَيُؤْتِيهِ فِي السَّيْرِ نَصِيْقًا مِّنَ الْمُنْكَمِرِ وَمِمَّنْ فِي الْأَرْضِ
الَّذِينَ آمَنُوا ثُمَّ كَفَرُوا فَبِمَا كَانُوا يَعْمَلُونَ ﴿٥٥﴾

"And the trumpet will be blown and all who are at the heavens and all who are on the Earth will swoon away, except him whom Allah wills. Then it will be blown a second time and behold, they will be standing, looking on (waiting)." (Soorah Az-Zumar 39:68)

The universe – or you may call it space and time – both are two
 structures created by Allah and never destined to fulfill the regulations
 of subordination and perfect dominion – which's center – The realm of the
 heavens is capable of a possibly their creation or creating's similar does
 the earth in the same way and at the same time in the same way.

or at other times

۴۰ ورنس بیو سحرور و کازم مطهر علی محمد بنامه ای و هر جنی عظیم ۴۱

"Is not He, Who created the heavens and the Earth Able to create the like of them? Yes, indeed! He is the All-Knowing Supreme Creator" (Suraah Ya Seen 36:81).

Then necessarily, we must accord the Creator of the universe Who shall definite will I up as the keeper of a scroll of pages to is them with ease His due regard.

﴿وَمَا تَعْبُدُوا إِلَّا اللَّهَ فَمَنِ الْغَافِلُونَ﴾ وَالْأَرْضُ جَمِيعًا قَبْضَتُهُ يَوْمَ الْقِيَامِ ﴿وَالسَّكُونُ﴾ تَطْمَئِنُّ السَّكِينَةُ ﴿وَتَقَالُ عَنَّا لِحُكْمٍ﴾

"They made not a just estimate of Allah such as is due to Him. And on the Day of Resurrection the whole of the Earth will be grasped by His Hand and the heavens will be curled up as His right hand. Glorified be He, and High is He above all that they associate as partners with Him." (Suraah Az-Zumar 39:67).

Possible scenarios of the Universe's end

QUESTION

In the previous topic, we examined the most acceptable theory in science in various aspects of today about the birth of our universe. The Big Bang theory, which is based upon scientific discovery, theorizes that the universe is constantly expanding at a great speed. Scientists say that at the material birth of the universe was a tiny concentration of a point whose size was no larger than a dot and that it exploded and the material of the universe became spread in all directions and that the universe began expanding from then onward till date.

We pointed out the significance of philosophy to this theory. We said that it is to test the truth of the existence of matter and the immutability of the universe, and established that the universe was created at a particular instant. As long as there was a creation, there must be a Creator, because this gigantic explosion was like no other explosion. Every explosion means total disorder shattering and destruction whereas this explosion led to the formation of a highly systematic universe. Therefore, an infinite power and perfect knowledge, which knows no end but has manifested in an apparent manner, has created this universe.

- ◆ Will the universe continue to expand ceaselessly?
- ◆ Will the force of gravitational attraction eventually overcome the force of expansion of the universe? Or will the reverse be the case?

There are two possibilities in this regard.

The first possibility: The speed of expansion (of the universe) will gradually slow down due to the effect of gravitation and eventually stop. Thereafter the universe shall begin to return (i.e. shrink) in the

reverse direction i.e. all galaxies, celestial bodies and orbits shall be flung towards the center (of the universe). The universe will dwindle and shrink upon itself due to gravitational force and the entire universe returns to a single small point the size of a dot, i.e. it returns to its primordial state. The meaning of this is the death and annihilation of the universe. Every destruction of the universe reaches the state

The second possibility: The gravitational force will be unable to overcome the force of expansion of the universe i.e. the universe will keep expanding ceaselessly. Does this mean that this infinitely expanding universe will never experience death? Several causes but death is constant.

Even under the second possibility, the Universe cannot escape the definite end of every creature, which is death. This is because, this explosive universe after its expansion all is dead via the process of radiation taking place in all stars. It will definitely die out. In this state the universe becomes like a tremendous gigantic cemetery devoid of any signs of life.

- ◆ However, what establishes that the gravitational force shall eventually overcome the force of expansion of the universe?

The answer to this question is if the rate of expansion of the universe is such that galaxies are able to escape the force of gravitation, then expansion shall continue endlessly. This is the example of an open universe.

If however the speed of expansion of the universe is less than the escape velocity, the expansion will stop after a period and the universe shall begin to withdraw upon itself in a retrogressive manner. This is the example of a closed universe.

- ◆ What is the escape velocity?

This is the minimum velocity required to escape from the gravitational force of any place. For example, the escape velocity with regards to the Earth is 11.2 kilometer per second. If you launch a

1. This is an Ameer saying that there are several causes of death but all lead to the same thing, death.

rocket at this speed then it will be able to overcome the gravitation of the Earth and enter into space. If the speed of the rocket is less than this velocity, then it travels a specific distance, stops and then begins to fall back to the earth due to its being overcome by the gravitational force. Every star, planet or moon has its own specific escape velocity.

- Is the speed of expansion of the universe up to the escape velocity $\times 2$ or is it greater than the force of gravitation in the universe or less?

This is an issue related to the present density of the universe. If this density is up to what is known as critical density, then it means that the gravitational force present in the universe shall in future be sufficient to halt the expansion of the universe. However, if it is less, then the universe continues to expand ceaselessly.

- Is the average density of the universe up to critical density?

Scientists have computed the value of critical density and found it to equal $1 \times 10^{-26} \text{ g/cm}^3$. This means that as long as the amount of matter in the universe is equivalent to three hydrogen atoms per cubic meter, then it would be up to critical density. They then computed the density of the universe and found it to be only a fraction of this.

- Does this mean that the universe shall continue to expand ceaselessly because its density is less than critical density?

We cannot say this or soon, because the amount of matter computed is by observation in the universe, that which they were able to view with optical and radar instrument. There is an enormous amount of matter which is not included in that computation. For example, Black Holes, about which we know virtually nothing. There is also what is known as the missing matter in the universe. Scientists observe that the amount of visible matter in galaxies can never be sufficient to sustain the continued existence of these galaxies as a body. Rather it requires ten or more times of this matter to remain coherent and in equilibrium. Therefore, the computed density of the universe is not its true density. The true density of the universe may be up to the critical density.

- What occurs in a closed universe?

The speed of expansion of the universe will apparently gradually begin

to diminish until it becomes zero, i.e., the expansion stops totally. Then the universe begins to race toward its center at a speed which increases with time. A continuous increase in temperature and pressure, then everything will appear natural after billions of years.

But, what if the size of the universe becomes one-hundredth of its present size, such that the temperature of space (which is presently low to almost zero) rises to the temperature of the Earth's daylight. A few millions of years' phantasmic flashes of the universe would attain an unbearable level and as temperatures will rise to millions of degree fahrenheit reaching this stage a form of life will have perished and become extinct. Then the stars begin to melt within the universal broth made of particles and radiation a broth whose temperature reaches billions of degrees. Then the universe becomes smaller and smaller until its size is just that of a small point close to a dot and becomes a black hole i.e., it gets to a state of singularity unrelated to time and space such that the laws of physics do not operate therein.

However, some atheist scientists who see in this theory the bankruptcy of atheism, proposed a third possibility for the universe. A possibility of pulsation or oscillation. Summarily, this process states that the universe has been expanding eternally due to Big Bangs, then it shrinks and contracts upon itself, then it expands due to another Big Bang and so on. Thus here the universe is eternal without a beginning or end. This theory has attracted and pleased atheist scientists who never want to accept the concept of Creator, resurrection or end of the universe. However, this example can neither stand before the discoveries of science nor before scientific logic. This is why we say it has been formulated suddenly (not due to systematic thought and study). Fortunately, it has met with total disregard within scientific circles, because science does not know of the ability of the universe to re-expand after shrinking into singularity. For example, to cite just one example, which the universe shall become after its shrinkage, escape is not possible from a "Black Hole". What then of the entire universe? Another problem facing this example is that of Entropy. This states that in any process or conversion of energy from one form to another, a certain amount is converted to forms which become unusable. When

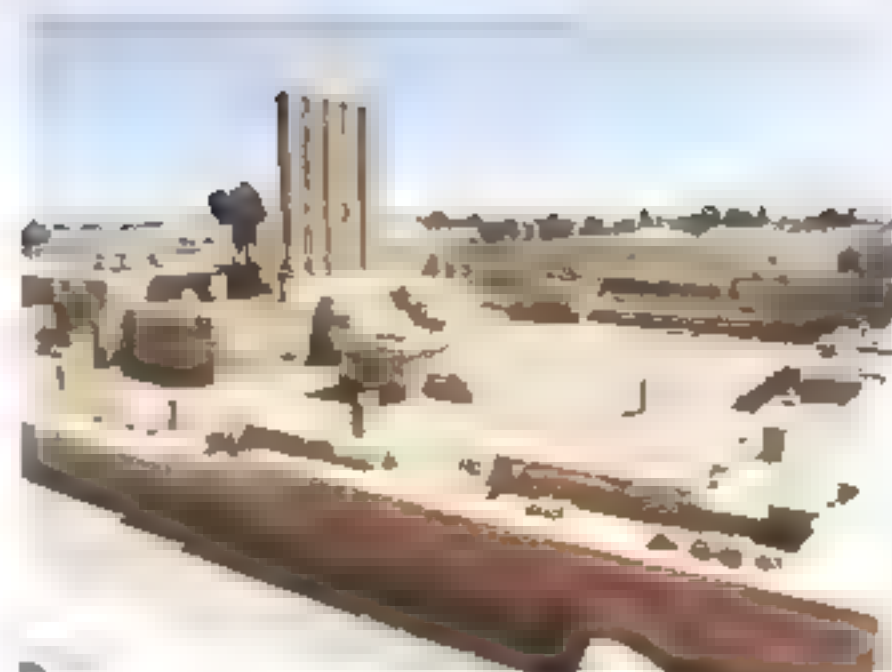
If an universe reaches its own singularity, there will not be any energy available in the universe and hence there will be no possibility of another because there is energy available for the change.

Thus, whether there is an example of an open universe or a closed one, death is the eventual end which the universe awaits. This does not imply that the end of the universe shall be by one of these means (i.e. these two examples of open and closed universe) because the possible modes of the end of the universe are numerous and can fill an entire book.

This is in regards to the universe, but with regards to our planet, the sun and the solar system, their ages are not as great as that of the universe. The age of the fuel in the sun is much less than the age of the entire universe.

﴿قُلْ مَا شَاءَ رَبِّي أَن يَكُونَ وَالْعَالَمِينَ﴾

"Whatever is on it (the Earth) will perish. And the face of your Lord (full of Majesty and Honor) will abide forever." (Soorah Ar-Rahman 55:26-27)



Bilqees Temple at Doha, Qatar

The throne of Bilqees (The Queen of Sheba)

Ar-Rah - the Most High - says:

﴿وَمَنْ يَرْجُوا يَفْرَحْ وَمَنْ يَسْتَعْجِلْ يَكُنْ خَاسِرًا﴾

"One with whom was knowledge of the scripture said: 'I will bring it to you within the twinkling of an eye!' - then when Sulaiman (Solomon) saw it placed before him, he said: 'This is by the Grace of my Lord - to test me whether am grateful or ungrateful! And whoever is grateful, truly his gratitude is for (the good of) his own self, and whoever is ungrateful, (he is ungrateful only for the loss of) his own self'. Certainly! My Lord is Rich (Free of all wants), Bountifully!" (Soorah An-Nami 27:40)

The story of Suleiman, peace be upon him, and Bulgees, the queen of Sheba, and the transfer of her throne is well known by some as an example of magic: how possible is it for a creature to transfer the throne of the queen of Sheba a distance of such a great distance in less than a second? ... Before the twinkling of Suleiman's eye? They say how despite the fact that it seemed to be impossible when it was such a possibility for Suleiman, peace be upon him). However, modern science knows that this does not have to be magic. It is scientifically possible within the sphere of science or at least from a theoretical view point of our capabilities within the twentieth century. But, how did that occur is the issue.

Energy and matter are two forms of the same thing. It is possible for matter to change into energy and energy into matter. This is according to known principle. Mankind has succeeded in converting matter to energy via atomic reactions which give rise to electricity (in nuclear reactors) even as his control over this conversion has continued to progress and develop in stages. He has also succeeded although to a lesser degree in converting energy into matter via the particle accelerator despite the fact that these have not progressed beyond the level of particles.

The conversion of matter to energy and energy to matter is something scientifically possible. Matter and energy are associates, and the possibility is not significantly hindered except by inertia associated with its occurrence under present scientific and practical conditions. No doubt the easy attainment of scientific methods and appropriate materials would assist for the easy conversion of energy to matter and matter to energy require great advances in science and expertise skills. Our level of scientific and practical (technological) capabilities at present in this regard is no more than that of a toddler learning to read (when compared to what is required to make the conversion perfect/reversible). Whenever in future that mankind is capable of easy converting between matter and energy, the result shall be radical changes and in fact tremendous revolutionary changes in a sphere of earth's life. One of the indications is that energy can be sent (at a pace of the speed of light as micro-waves and then we convert it back to

matter! Therefore, we shall be able to send any instrument or even our entire humanity to any location we have upon earth or in any region or to Mars within a few seconds or minute.

The fundamental difficulty physicists envisage with regards to achieving this dream is the arrangement of the parts (of the atom) or atoms of matter in the exact original position; each atom in its former position before being converted to energy such that it can act as it originally did. Another scientific difficulty which preoccupies science as of today is the ability to capture electromagnetic waves; presently this does not exceed sixty percent due to dispersion of most of it in space. All these serve as obstructions in the face of the present position of science and its capability to convert matter to energy and vice versa.

Now let's return to the issue of the transport of the throne of Queen Bulgees. Its logical explanation is that the one who had knowledge of the Book (be he a man or jinn) as much as we know of today, first converted the throne of the Queen of Sheba into a form of energy (not necessarily in the form of heat energy similar to what we get from modern atomic reactions which has low efficiency). Rather, in a form similar to electrical or light energy which can be transmitted as electromagnetic waves.

The second step is that he sent the energy from Sheba to King Suleiman. Since the speed of travel of electromagnetic waves is the same as that of light (300,000 kms) when the time to reach Suleiman a distance of three thousand (3,000) kilometers away. The third and final step is that he converts the energy after arriving back to matter in the exact form it was, every part or atom returns to its former position.

Certainly, twentieth century man is incapable of accomplishing what his being with knowledge of the Book did over two thousand (2,000) years ago. The present capability of man does not exceed attempting to understand the explanation of what occurred. All that man has achieved in the twentieth century is the conversion of some matter (heavy elements) like uranium to energy by the fission of the atoms of these elements.

As for other nuclear reactions which occur via the fusion of the



atoms, i.e. the element such as hydrogen and helium and produce the energy of the sun and stars, man has not been able (at present) to achieve this. But man is able to achieve the production of energy via atomic fusion, energy produced in the original form was dispersed by the light, i.e. transmitted over great distances without a dispersion of the greater half of it. The conversion of matter to microwaves by human presently occurs via a process which necessitates its conversion first to heat energy, then mechanical energy, then electrical energy and finally transmitted as microwaves. For this reason we find that the greater half of the matter we started with is dispersed during these conversions, leaving only a small fraction which we can transmit as microwaves.

The capability to convert matter to heat energy, then to mechanical energy and to electrical energy does not exceed twenty percent. Until we submit the efficiency of nuclear fission analogy, i.e. conversion of uranium to energy, then the fraction of uranium converted to energy remains very small. The greater half of uranium has not yet achieved its energy over a period of billions of years, decaying eventually into lead. This is not the desired end result! In the final event, it is necessary to gather and collect all these wastes and then re-convert it to energy and then to matter with every part, atom or particle in its original position. The capacity to gather all these radiation at present and convert it into electrical energy in the form it was transmitted does not exceed fifty percent, i.e. nothing will remain of the original matter after its conversion from matter to energy, its transmission as electromagnetic microwave, its capturing and conversion back to energy except ten percent. This is before performing the final step which is the conversion of the energy into matter. This final step, i.e., conversion of the energy into matter is the exact opposite of what a twentieth century man is yet incapable of. Therefore, we do not know the efficiency of capturing at this final step. If we assume that under the best conditions, man can successfully convert fifty percent of the remaining energy into matter then what we achieve is less than fifty percent of the original matter we started with.

This means that if we commenced with the throne of Queen Bilqees and we converted it by whatever means into energy, and then we



transmitted this energy as microwaves, then we re-captured it and converted it back to energy and then to matter, we would not have more than five percent of the throne of Queen Bilqees. As for the rest it would have been dissipated during the several conversions according to the superlative efficiencies of these processes. This five percent of the throne of Bilqees is precisely enough to afford a reconstruction of a small part of the throne such as the legs or arm rest of the Queen's throne.

The Verse of the Qur'an does not specify the personality of this one with whom was knowledge of the scripture. Was he a man or jinn? A great number of the scholars of *ash'ari* have mentioned that the one who came to be the throne of Bilqees was a man by the name of Yasir bin Burkhiya'u, who had with him the greatest of Allah's names by which all things beseeched His response. Perhaps he was the one who said this was an *ahil* (very strong) one amongst the Jinns.

Perhaps his Jinn was excited to converting the throne of Bilqees into energy, then transmitted over thousands of kilometers, then re-converted to its original form, matter, such as it was before. And these in a second or in a several seconds if we consider the goal of the previous journey intended to be a small batch. So when a piece of upon him, rose from his seat.

The level of knowledge and capability of either of the two Jins about two thousand five hundred years ago is much higher than the level of knowledge, technical and even the capability which twentieth century man has achieved.

(Ayatul Qur'anyyah Fi Mukhat Al-Tim by Yahya Al-Mahjuri, with some modifications)



CONCLUSION

Allah's signs in the Heaven and the earth

Allah's signs in the Heaven and the Earth

﴿قُلْ أَظْهَرُ عَلَيْكُمْ أَنَّ السَّمَوَاتِ وَالْأَرْضَ وَمَا فِيهِنَّ الْآيَاتُ وَالَّذِينَ يَنْفَرُونَ عَنْ قُرْبَى لَا يُؤْمِنُونَ﴾

"Say, behold all that is the heavens and the Earth, but neither Ayat (proofs, evidence, Verses, lessons, Signs and revelations, etc.) nor warners benefit those who believe not." (Soorah Yunus 10: 101).

The Universe

The Earth upon which we live is at a distance of ninety-two and a half million miles from the sun whose surface temperature is up to twelve thousand Fahrenheit, and the moon is a distance of two hundred and forty thousand miles away from us. These distances provide a suitable environmental condition for the life in the form that we know on the Earth. If the Earth were to approach the sun just a little bit, then all life on it will be charred instantaneously and traces of life will disappear. And were the sun to recede away from it (the Earth) a little more, then all forms of life upon it will freeze and eventually die out.

Likewise, was the moon to approach (the Earth) a little, then the continents would be submerged by flood and a global life would be destroyed. Due to the gravitational force of the moon, it maintains and holds us by its proximity and if it goes away from the Earth, and all life will be ruined.

The Earth rotates upon its axis at a speed of one thousand miles per hour, i.e. at a speed of 1000 m/h, equivalent to one complete rotation every twenty-four hours. If its speed were to decrease a little, the day would be prolonged with attendant dryness, heat, and the night also prolonged resulting in a freeze due to the water-like effect of night. Therefore, the factors basic requirements of life would diminish and

if continuous would vanish one after the other.

If the thickness of the Earth's crust were to increase a little, then the amount of oxygen would decrease and the possibility of life would diminish. If we assume that the thickness of the Earth's crust were to decrease by one foot, then life will vanish due to the vanishing of oxygen. If the oxygen level were to increase a little, then life the world will experience extinction due to disequilibrium in the lens of the atmosphere. Hence, all planets and cosmic bodies would tumble.

Those who live on the shores of seas and oceans or those have to reside close to them usually have to vaporize and then condense its water in order to remove the salt, therefore to make palatable for drinking. When they would wish that the salt water body would be fresh water just as the waters of the rivers. Were their wish to come true and all the salt water become fresh, then it would have become putrid all through and life on Earth would have ended and become a desolate land. The water of the oceans and seas are stagnant bodies and the salt in them prevents decay or rot.

Take a look at the water cycle on Earth and you will find that it has been created according to measure and precision. The sun vaporizes the water of the seas and oceans (which is regarded as a repository whose stored water is not diminishable), it rises to cold layers in the sky, condenses in order to fall as fresh water flowing in rivers, watering plants and livestock, and filling the universe with life. Is this then by chance?

Take a look at the rotation of the Earth about itself, its revolution around the sun and the inclination of its axis which is up to twenty-three degrees. See how the periods of the year are formed from bringing water to element spring, then to hot summer and an amiable autumn. Were the axis to be vertically upright, then the Earth would not rotate around itself. All drops of water vaporized from the oceans and seas would coagulate and fall upon only two delimited places in the north and the south. Continents would form of ice and summer and winter would be perpetual and all mankind, life and living things would perish. Is this by chance?

The Vastness of the Universe

Allah, Most High, says in His Honored Book

﴿وَاللَّهُ بِقُوَّتِهِ بَالِغٌ إِلَى الثُّرَىٰ﴾

"With power did We construct the Heaven. Verily, We are Able to extend the vastness of space thereof" Soorah Adh-Dhaariyat 51:47).

The scientist (Ballou) says in his book titled *Science looks to Space* "The universe is more extensive and larger than we used to imagine. The remotest part of the universe is not any farther from us than the nearest. Astronomers had concluded that space between stars is total empty vacuum, but in reality it is filled with gases and different types of matter. There are clouds of gases in space which are as far as six billion miles.

The sun and planets revolving around it are recent phenomena time-wise according to astronomical calculations. For most of the revolving planets, their ages do not exceed three billions years."

Ballou also says: "The entire universe with the limitless variation in the sizes of its stars which are flung in a confusion as though they were the splinters of a detonated bomb, is seen as a picture which is difficult for a person to imagine without being dazzled and losing one's breath. What is more amazing and breathtaking, is the viewing of all these by this a minute creature known as man who lives on a splinter of a small star in a minute sphere of a galaxy not different from several millions of its kind. His being seeks to gaze at the ends of space but is limited. Then he exerts himself in order to understand the universe.

♦ Astronomers say there are some stars and planets of these several billions—those which can be seen with the naked eye and those which cannot be seen except with magnifying glasses and instruments etc. There are those which can be perceived by instruments without being seen. As these are not visible to the eye, there is no possibility of the man's knowledge of a star coming close to that of another or the collision of one planet with another except as the possibility of collision between a boat in a Mediterranean sea and another in the Atlantic. Again both traveling in the

same direction. This is a far-fetched possibility if not totally impossible.

♦ Science proves that the speed of light is one hundred and eighty-six thousand miles per second. There are stars whose emission of light reach us in minutes, some whose emission will reach us in months and some which have emitted their light (which we know using sophisticated instruments millions of years ago) and the light is yet to reach us. So, what is the breadth of the universe?

♦ The atmospheric envelope surrounds the Earth. Its thickness is about one hundred miles and is made up of a mixture of oxygen, nitrogen, carbon dioxide, water vapor, ozone and other gases mixed in definite proportions. Any change in these proportions (an increase or decrease) leads to the loss of life and living being.

♦ The atmospheric pressure reaches 14.7 lbs per square inch at sea level. This is the pressure that pushes oxygen through the lungs and the air is pushed in so as to be distributed throughout all the parts of the body. Any minute variation in this pressure results in a situation that may lead to death. From research it has been found that during high altitude flights, where the pilot rises above fifteen thousand feet, he experiences what is known as the blocking of the air artery. He dies when he reaches a height of twenty-five thousand feet. Glorified is Allah, the One Who perfected the creation of all things.

Some of the contents of the universe

Allah says:

﴿أَمْ لَمْ يَنْظُرُوا إِلَى السَّمَاءِ فَوْقَهُمْ كَيْفَ بَنَيْنَاهَا وَزَيَّنَّاهَا وَمَا لَهَا مِنْ فُرُوجٍ﴾

"Have they not looked at the heaven above them, how We have made it and adorned it, and there are no rifts in it?" (Soorah Qaf 50:6).

♦ Al-A'namah Surka said: "A person cannot raise his sight to the high heaven without awestruck being in its splendor and out of sobriety when he sees the millions of brilliant glowing stars and he watches their movement in their orbits and in mansions they have been assigned. As stars and any planet, an nebula and any roaming body is a separate world on its own larger than the Earth, its contents and what surrounds it.



The Earth

♦ The Earth is one of the planets which revolve around the sun following it (the sun) in its voyage. It is the fifth planet in terms of size and the third (in terms of proximity to the sun) of nine planets which constitute our Solar System.

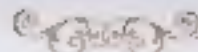
♦ The Earth is nearly a sphere except that it is slightly dented (flattened) at the poles and bulges at the equator. Its polar diameter is estimated at seven thousand nine hundred miles while its equatorial diameter is nine thousand seven hundred and twenty seven miles. Its polar circumference twenty-four thousand two hundred and twenty miles while its equatorial circumference is twenty-four thousand nine hundred miles.

♦ Its surface area is about two hundred million square miles. Dry land covers about fifty million square miles while roughly one hundred and fifty million square miles is covered by water.

♦ It rotates (carrying us along) about itself once every twenty four hours. Anyone in the tropic area therefore moves at an average speed of one thousand miles per hour or sixteen miles per minute.

♦ It revolves around the sun in its orbit (which is up to five hundred and eighty million miles). Thus its average speed in this motion is up to sixty thousand miles per hour or about one thousand miles per minute. The entire Solar System with the Earth covers distances in space at a speed not less than twenty thousand miles per hour, i.e. greater than three hundred miles per minute in the direction of Hercules constellation.

♦ As for the age of the Earth, man has been trying to predict it for a long time. In the seventeenth century, Bishop James Arthur said: "The world began on the twenty-sixth of October, four thousand and four years, before the birth of Christ." In one of the books of Hindu religion, the age of the world is 1,972,949.56 years. In modern times, effort has been commenced by astronomers in observatories to obtain the most precise value of the age the Earth. Eventual reliable



estimate from the observatories indicate the age of the range of about 54,000,000,000 years and the relative error in this estimation is about twenty percent.

The Sun

The sun is a sphere of burning gases whose age is five billion years and has a diameter of greater than 1.3×10^6 kilometers. Its circumference is three hundred and twenty times that of the Earth and its weight three hundred and thirty-three times that of the Earth. Its internal temperature is up to twenty million degrees ($20,000,000^\circ\text{C}$) though its surface temperature is only six thousand degree ($6,000^\circ\text{C}$).

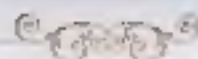
♦ Its surface spits out flames which rise to about half a million kilometers dispersing energy in space at a continuous rate of one hundred and six seven thousand four hundred horse power per cubic meter ($167,400 \text{ hp/m}^3$) and all that reaches the Earth thereof is only one part in two million ($1/2,000,000$). And it (the sun) is considered only a small star and not one of the giant stars.

♦ On its surface, there are very strong electrical and magnetic storms. One of the bewildering issues for scientists is that the sun as understood from the knowledge of the layers of the Earth has not ceased to radiate the same quantity of heat for millions of years. No doubt, the form of combustion taking place in it is different from that with which we are acquainted or familiar, otherwise, six thousand years would have been sufficient to combust and exhaust its heat. Some think that the meteors and meteorites falling onto its surface replenish what is lost via radiation of heat.

Eventually, it has become clear that the process which gives rise to the heat of the sun is the conversion of its fuel, hydrogen which is abundant in the sun and in other stars, to helium. This occurs via a chain of intricate nuclear reactions, which gives rise to unimaginably tremendous amounts of energy.

Dr. Thomas Gold (deputy director of the Center for Radio-Physics and Space Research) has declared that an explosion occurred within the sun on the thirteenth of February, 1956, equivalent to the combined force (energy) of millions of hydrogen bombs. This explosion resulted





in the hurling of heavy showers of cosmic radiation toward the Earth. In his explanation he said: "The rise in cosmic radiation commenced at 3.45 am Greenwich time and lasted roughly two hours. The increase experienced by the Earth is regarded as the largest in history."

He describes the explosion as having occurred in a zone (of the sun) greater than the surface area of the Earth and the strength (of the explosion) was so strong that human imagination cannot contemplate its (resulting) cosmic radiation. The body of every man, woman, child and any living being received double the normal amount of radiation coming from any direction of the universe.

However, the Harvard Observatory broadcasted an explanation in which Dr. Donald Mitzel, its director, said: The explosion which occurred in this sun has been recorded on films using a coronagraph, an instrument for recording heat radiation and light radiation emanating from the Earth. It shows that the force of the explosion is equivalent to one hundred million (100,000,000) hydrogen bombs detonated at once and that it is greater than the Earth's gravitational force by over a thousand times. Allah, Most High, Knows best, and is the Most Wise.

(Allahua wal-lahu al-Hakumu by Ashraf Razaq Marhal)





الإعجاز العلمي

في الأرض وفي السماء باللغة الإنجليزية



Every Prophet had a miracle which he showed to his people and challenged them with. Some of the Prophets even had more than one sign as a definite proof that they were sent by Allah; challenging their nations to bring anything similar to it if they denied it. Every sign given to any of the Prophets was exclusively meant for his people and when he died, his signs ceased to exist.

However, one such miraculous sign shall remain, complete and preserved with the command of Allah, until the Day of Resurrection. This miracle is the immutable Qur'an, the everlasting book of Allah given to Prophet Muhammad (peace and blessings be upon him). Anyone who lives after the death of this Prophet of Mercy will be able to see it, read it, and realize for themselves the truth that it contains.

Who was the teacher who taught Prophet Muhammad the scientific facts described by the Qur'an? Did he possess tools of scientific research that enabled him to discover all that? Did he have airplanes and rockets that enabled him to discover what was beyond the sky?

The answer is that He possessed such knowledge that could never be affected by falsehood because it is the word of God. All that he informed us - of the past and present signs in the Universe and within ourselves - has been discovered by science as proven fact, and no doubt, the future signs will be discovered, just as he predicted.



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OF GREAT LEADER IN ISLAMIC BOOKS

